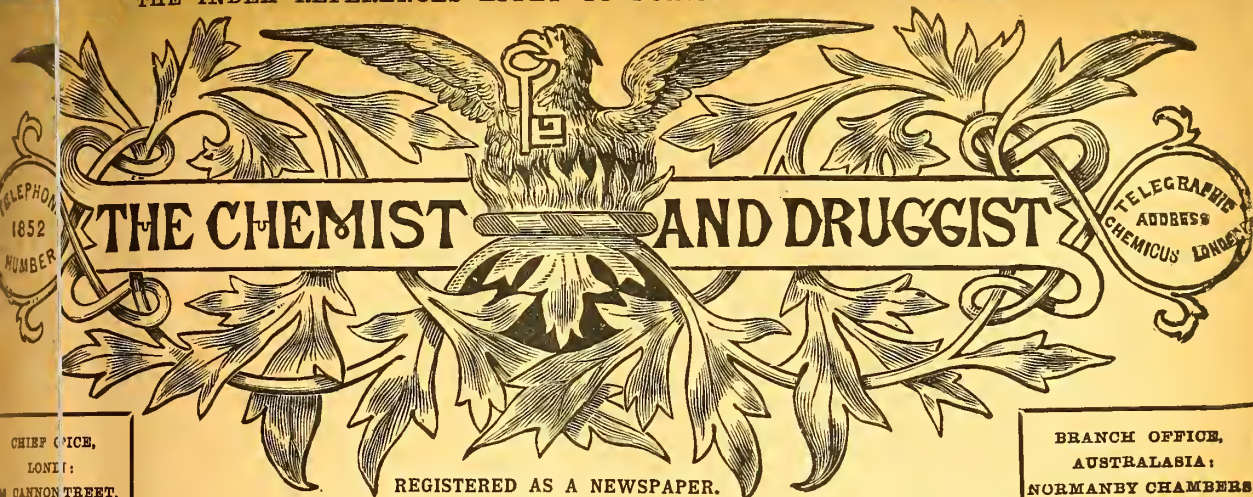




CHIEF OFFICE,
LONDON:
CANNON STREET,
E.C.

BRANCH OFFICE,
AUSTRALASIA:
NORMANBY CHAMBERS,
MELBOURNE.

Subscription: **10/- PER ANNUM**, Post Free to any Part of the World.

ESTABLISHED IN

ENGLAND ... 1859.
AUSTRALASIA ... 1885.

[Registered for Foreign Transmission.]

Sold at Stationers' Hall.]

N 421. Vol. XXXII.

MAY 12, 1888.

[SUBSCRIPTION, 10s. PER ANNUM, INCLUDING
DIARY, POST FREE THE WORLD OVER.
SINGLE COPIES, 4d. EACH POST FREE.]

Applied IN BULK, also in $\frac{1}{2}$ -lb. Bottles, labelled either with or without our Name and Address.

EFFERVESCENT SALINE.

This is a finely granulated preparation, which, in dissolving, produces a sustained sparkling effervescence, and a clear bright solution.

It possesses all the advantages of an agreeable Saline, combined with the anti-febrile properties of Chlorate of Potash. It is an excellent febrifuge, and makes a very pleasant and refreshing beverage, whilst, if taken before breakfast and in adequate doses, it forms an efficient aperient.

ALLEN & HANBURY'S,

Manufacturers of Cod Liver Oil, Malt Extract, and Pharmaceutical Preparations,

Also of MEDICATED and other LOZENGES and IMPROVED JUJUBES,

WHOLESALE & EXPORT DRUGGISTS,

PLOUGH COURT, LOMBARD STREET, LONDON, E.C.

Works—Bethnal Green, E., and Longva and Kjerstad, Norway.

TELEGRAPHIC ADDRESS—"ALLENBURYS LONDON."

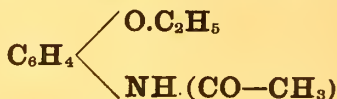
EXCHANGE COLUMN, PAGE 12.

ADVERTISERS' AND BUYERS' REFERENCE LIST AND INDEX TO ADVERTISEMENTS, PAGES 21-23.

THE NEW ANTIPYRETIC

PHENACETINE—BAYER

(Para-Acetphenetidine)



MANUFACTURED BY THE
FARBENFABRIKEN VORM. FRIEDR. BAYER & CO
ELBERFELD.

THERAPEUTIC PROPERTIES.

IN HEALTHY PERSONS Phenacetine, according to Dr. Köbler, does not produce any ill-effects in doses of 0.5—0.7 gm. (8—12 grains); but in all cases of pyrexia even relatively small doses of 0.3 gm. (5 grains) are never without perceptible antipyretic effects. To adults it is best administered in single doses of 0.6—0.7 gm. (10—12 grains), instead of smaller ones given repeatedly; no disagreeable after effects, such as nausea, vomiting, or cyanosis, were ever observed in 50 cases presenting various febrile conditions. On the contrary, at fever temperatures of 39.5—40.5 C. (103.1—104.8 F.) a reduction of 1.5—2.5 C. (2.7—4.5 F.) invariably ensued; the reduction is usually gradual, reaching its maximum in 4—6 hours, the rise is likewise gradual, extending over 8—10 hours. Decrease of temperature (Apyrexia) is usually obtained without sweat secretion but the pulse improves and a pronounced euphoria ensues.

Phenacetine does not cause any disagreeable symptoms in healthy persons even in doses of 1—2 gm. (16—32 grains); in 20 cases (12 adults and 8 children) in which it was administered it proved to be a quick and energetically acting antipyretic. Nausea, vomiting, cyanosis, collapse, or other disagreeable after effects never occur. Dr. Hoppe fully confirms Dr. Köbler's statement as to the gradual fall and very slow rise of fever temperatures. Both investigators agree that Phenacetine produces **Apyrexia** as surely as any other antipyretic.

FOR CHILDREN.—In eight cases reported upon by Dr. Hoppe, Phenacetine acted energetically as an antipyretic in children in doses of 0.2—0.4 gm. (3½—7 grains) without causing any disagreeable symptoms, and Dr. Sluysen and Barthelemy have recently given it to young children in doses of 0.5 gm. (8 grains); he obtained by its administration not only the desired antipyretic effect, but also a condition of evident comfort and quiet.

NEURALGIA.—Besides its antipyretic effects, it possesses eminently antineuralgic properties. Dr. Hoppe publishes 15 cases of severe cephalalgia and migraine, where Phenacetine produced an effect which was most beneficial and, at the same time, most astonishing. It should also be mentioned that Phenacetine was of special value in a case which had previously, but unsuccessfully, been treated by Antifebrin and Antipyrin. In such larger doses as 1—2 gm. (16—32 grains) given several times a day, Dr. Hoppe has found Phenacetine to be an excellent antineuralgic; it does not act quickly, but surely (generally in 1—2 hours), without causing any ill effects. On this point Dr. Heusner also says:—

"Phenacetine promises to become a most valuable addition to therapeutic agents, owing to its beneficial influence on the nervous system. It is not a narcotic like morphia, but acts, as Dr. Hoppe also observes, similarly to Antipyrin, as a most comforting and pain-allaying. Its wonderful anodyne effect is shown in cases of neuralgia and other derangements of the nervous system arising from reflectant irritation or general nervousness. I have prescribed it almost daily in cases of migraine, gastralgia, ischias, insomnia, &c., caused by diseases of the uterus, the kidneys, or by overwork, &c., and have frequently heard it highly and enthusiastically praised. In insomnia caused by over-work and nervous excitement I myself have taken doses of 1 gm. (16 grains) with the best result. Phenacetine, contrary to quinine, bromide of potassium and the narcotics proper, does not cause lassitude or other disagreeable symptoms, and is easily taken on account of its tastelessness. As it promises to become an important remedy in many hysterical, neuralgic, and other nervous disorders, I do not hesitate to predict for it in this respect a distinguished place among therapeutic agents."

MAY BE HAD THROUGH THE WHOLESALE DRUGGISTS, OR IN QUANTITY FROM

MAY & BAKER,

MANUFACTURING CHEMISTS,
 BATTERSEA, LONDON, S.W.

STEVENSON AND HOWELL

FELLOWS
OF THE
CHEMICAL
SOCIETY
&c.

MANUFACTURING CHEMISTS
DISTILLERS
AND IMPORTERS OF

ESSENTIAL OILS

OF
GUARANTEED PURITY
PURE CONCENTRATED

SOLUBLE ESSENCES

FRUIT-ESSENCES

SELECTED
OIL of LEMON
GUARANTEED
ABSOLUTELY PURE.

SOLUBLE ESSENCE
OF
LEMON.
SWEET ORANGE
BELFAST GINGER ALE
TANGERINE
FRUIT
CHAMPAGNES.
2s. 3s.

AMERICAN
FOAM SYRUP,
FOR GIVING A CLOSE
CREAMY HEAD TO
ALL BEVERAGES

ALL MATERIALS
REQUIRED BY
CONFECTIONERS
BISCUIT MAKERS
WHOLESALE
TOBACCONISTS.
SOAP MAKERS,
PERFUMERS,
2s. 2s.

PURE COLOURINGS

OF EVERY DESCRIPTION

ANALYTICAL AND CONSULTING CHEMISTS

STANDARD WORKS,

95A SOUTHWARK ST., LONDON. S.E.

AND 128, HOPE ST., GLASGOW.

BARCLAY & SONS, LIMITED

(Druggists' Sundriesmen, and Wholesale Patent Medicine Vendors, 95 Farringdon Street, London, E.C.)

CAPITAL £100,000, IN £20,000 SHARES OF £5 EACH

Viz.: 10,000 Six per cent. Preference Shares, and 10,000 Ordinary Shares.

On both classes of Shares, Ten Shillings per Share is payable on Application, £1 10s. per Share on Allotment, and £1 in one month; the remaining £2 will be called up if and when required.

Interest at the rate of 5 per cent. per annum will be allowed on amounts put up in advance of calls.

The Preference Shares will be entitled to 6 per cent. Dividend on the amount called and paid up as a first charge on the profits in each year.

The Ordinary Shares will be entitled to all the remainder of the profits in each year up to 10 per cent., but no further Dividend than 10 per cent. will be paid unless an amount equal to such further Dividend is at the same time carried to a Reserve Fund.

DIRECTORS.—GEORGE ROBERT BARCLAY, Esq., *Managing Director*, 95 Farringdon Street, E.C.
WM. POWELL, Esq., of THOMAS POWELL, LIMITED, Proprietors of POWELL'S PILSNER BEER, ANISEED, Albion Place, Blackfriars, S.E., and Waddon, Surrey.
HORACE DAVENPORT, Esq., 33 Great Russell Street, W.C., Chairman of the Chemists Aërated and Mineral Waters Association, Limited; and Surbiton, Surrey.
ARTHUR EDWARD BARCLAY, Esq., F.C.S., 95 Farringdon Street, E.C.
JOHN PAUL QUICK, Esq. (Messrs. NAYLOR BROTHERS & QUICK), Janes Street, Oxford Street, W.

BANKERS.—THE LONDON & WESTMINSTER BANK, LIMITED, Lothbury, E.C., and Branches.

SOLICITORS.—MESSRS. ALLEN & EDWARDS, 8 Old Jewry, E.C.

AUDITORS.—MESSRS. CHADWICKS, BOARDMAN & CO., 36 Coleman Street, E.C., and 34 Cross Street, Manchester.

SECRETARY (*pro tem.*)—MR. GEORGE B. COOK.

REGISTERED OFFICES.—95 FARRINGDON STREET, E.C.

THIS Company has been formed to purchase and carry on the well-known business of **Barclay & Sons Wholesale Patent Medicine Vendors, Manufacturers, and Druggists' Sundriesmen**, which has been carried on by them in Farringdon Street for more than a hundred years.

The business has always been successful and profitable.

The average sales during the last five years amounted to £164,000 per annum. The sale in 1887 amounted to £171,890.

Except by the adoption of the cash and short credit system, the business has been steadily carried on, without material deviation, on the same principles on which it was first established by the grandfather of the present senior partner, who in his turn is now retiring, being nearly seventy years of age, and the opportunity has been taken of this necessary change to convert the concern into a limited company.

The reputation of the firm is based on uniform excellence of materials, good service, and punctuality.

All the present business will be continued, with various profitable extensions, which have been contemplated for some time. These extensions of business, whilst equally safe and prudent, will no doubt be more profitable than the old steady general agency business of the Firm. But it is not intended to undertake speculative business of any kind.

The Patent Medicine business of BARCLAY & SONS is **the oldest and the largest in their special trade** in England, and their Business operations have gradually extended to nearly every Town and district in Great Britain and Ireland, and to all parts of the **World**.

The New Warehouses, Store Rooms, and Offices in Farringdon Street were erected by the Firm about 18 years ago on Leasehold Land now held under St. John's College, Oxford, for a present unexpired term of 81 years.

The Company take over the leasehold premises, warehouses, and store rooms in Farringdon Street, and other properties in the occupation of the Firm, together with the stock in trade according to a cost price Inventory, and the Book Debts, Assets, Trade Marks, Proprietary Interests, and Goodwill of the entire business. The Book Debts are guaranteed by the Vendors.

The purchase also includes the Firm's interest as sole proprietors and manufacturers of various well-known and old-established patent articles of great repute.

The purchase-money has been fixed at £55,000, made up as follows:—

Value of Stocks on hand as per cost price Inventory of December 18th, 1887, balance of guaranteed Debts owing to the Firm in excess of the certified Debts owing by the Firm, Cash in hand and at Bankers	...	...	...	...	...	...	...	...	£22,716 11 8
Value of Leasehold Land, Warehouse, Offices, and Store Rooms in Farringdon Street, having 81 years unexpired, subject to a Ground Rent of £400 a year, and of the land and adjoining Warehouses and Stores, held on various terms of tenancy, none being held for less than 70 years, and a small part being Freehold, together with the extensive Warehouse Fittings, Fixtures, Furniture, Goodwill, Proprietary Rights and Trade Marks	...	...	...	...	...	...	...	...	£32,283 8 4
Total purchase-money	...	...	...	...	...	...	...	...	<u>£55,000 0 0</u>

The purchase-money will be payable by £15,000 in paid-up Ordinary Shares, and the balance in Cash by instalments within three months, and bearing 4 per cent. interest from the agreed date of transfer.

The signed Balance Sheets and the average profits made and divided by the Firm during the last five years, and in all previous years, have been uniformly satisfactory.

The Transfer will take effect as and from the 18th December, 1887 (the last stock-taking), and all the usual business of the Firm since that date will be taken over as having been transacted by the Firm as the agents of the Company and for their benefit. None but the usual Trade transactions have been entered into since that date.

All Agency, Legal, and other expenses in connection with the formation of the Company, up to the allotment of Shares, will be paid by the Vendors, and no promotion money or other intermediate profit will be paid by the Vendors or charged to the Company.

Mr. GEORGE ROBERT BARCLAY will retain the general management of the business, and will devote his whole time thereto as the Managing Director, and Mr. A. E. BARCLAY, who is a duly qualified chemist and druggist, will continue to direct the manufacturing and chemical departments of the business.

The only contract entered into beyond the ordinary trade contracts, and the usual trade agreements connected with the current business, is the purchase agreement, dated the 9th day of May, 1888, and made between GEORGE BARCLAY and GEORGE ROBERT BARCLAY, the Vendors, of the one part, and BARCLAY & SONS, Limited, of the other part.

Copies of the Agreement can be seen at the Office of Messrs. ALLEN & EDWARDS, the Solicitors of the Company, and all further information and forms of application for shares can be obtained on application to Messrs. CHADWICKS, BOARDMAN & Co., 36 Coleman Street. London, E.C., or at the Registered Offices of the Company.

LONDON, 9th May, 1888.

ESTABLISHED 1842.

THE SCHOOL OF PHARMACY*Of the Pharmaceutical Society of Great Britain.*

Chemistry, Prof. DUNSTAN, F.C.S., &c. Practical Chemistry, Prof. ATTFIELD, F.R.S., &c.
 Botany, Prof. GREEN, B.Sc., &c. Materia Medica, Mr. E. M. HOLMES, F.L.S. Practical Pharmacy, Mr. JOSEPH INCE, F.S., &c.

FORTY-SIXTH SESSION, 1887-88.

Application for admission to the School, for Prospectuses, or for further information may be made to the Professors or their Assistants in the Lecture Room or Laboratories, 17 Bloomsbury Square, London, W.C.

**THE LONDON HOMŒOPATHIC HOSPITAL
AND MEDICAL SCHOOL,**
 GREAT ORMOND STREET.

A NEW WARD, unoccupied for want of funds, is much needed for Male Patients, and will be opened so soon as sufficient funds to support it are received. The Hospital now contains eighty beds. Trained Nurses are sent out at moderate fees for Medical, Surgical, or Accouchement cases, the latter specially Certificated.
 G. A. CROSS, Secretary.

With 71 Woodcuts and numerous Exercises and Answers.
 Crown 8vo. price 6s. 6d.

**THE FUNDAMENTAL PRINCIPLES OF CHEMISTRY
PRACTICALLY TAUGHT, by a New Method.**

By ROBERT GALLOWAY, M.R.I.A. F.C.S. Honorary Member of the Chemical Society of the Lehigh University, U.S.; Author of "A Treatise on Fuel, Scientific and Practical," &c.
 London: LONGMANS, GREEN & CO.

Just Published, Crown Octavo, Price 5s.

**A PRACTICAL MANUAL OF VENEREAL AND
GENERATIVE DISEASES:**

Including SPERMATORRŒA, PROSTATORRŒA, IMPOTENCE, and STERILITY in Both Sexes.

By M. K. HARGREAVES, M.D.

LONDON: R. KIMPTON, 126 WARDOUR STREET, LONDON, W.

**THE LIVERPOOL
SCHOOL OF PHARMACY**

36 OXFORD STREET, LIVERPOOL.

Principal—Mr. J. S. WARD, F.C.S. (Pharm. Chemist, &c.)

PASS LIST FOR APRIL.

MAJOR—Mr. T. W. CARR, Knaresborough.

MINOR—Mr. DAVID HUGHES, Holywell.

Mr. JOHN NEWTON, Heckington.

Mr. W. P. WILLIAMS, Llanberis.

At the previous Examinations TEN were sent in for the Minor, and EIGHT passed.

Syllabus, with Time Tables, Fees, Pass Lists, &c., sent free on application.

NEW EDITION of WATTS' DICTIONARY of CHEMISTRY.

To be published in Four Volumes, 8vo.

VOL. I. (*Alies—Chemical Change*) price TWO GUINEAS, now ready.

**WATTS' DICTIONARY OF
CHEMISTRY.**

Revised and entirely Rewritten by

H. FORSTER MORLEY, M.A., D.Sc.,

Fellow of, and lately Assistant-Professor of Chemistry in, University College, London;

And M. M. PATTISON MUIR, M.A., F.R.S.E.,

Fellow, and Prælector in Chemistry, of Gonville and Caius College, Cambridge,

Assisted by Eminent Contributors.

LONDON: LONGMANS, GREEN & CO.

L OISETTE'S System of Memory Training is the ONLY one by which the Natural Memory can be improved until no Device is needed. Mr. PROCTOR, author of "Old & New Astronomy," and of "Astronomy" in the *Encyclopædia Brit.*, says "Prof. LOISETTE'S Method appears to me admirable." Prospects, containing opinions of pupils who have PASSED EXAMINATIONS, and members of the Medical, Scholastic, Clerical, etc., professions, post free from Professor LOISETTE, 87, New Oxford Street, London.

"Concilio et Labore."

**THE MANCHESTER COLLEGE
OF CHEMISTRY & PHARMACY,**

225 and 227a OXFORD STREET, MANCHESTER.

Director Mr. W. SPENCER TURNER.

SIX Students from this School passed the Minor at the April examinations, viz.:—

Mr. H. BENNETT

Mr. A. BARRATT

Mr. A. BARLOW

Mr. A. GADDES

Mr. A. HALSTED

Mr. R. WOLFENDE

SIX M.C.P. men passed in January, and FOR all who entered, in February.

Students wishing to join the Classes for the July examinations are requested to do so without delay.

**WESTMINSTER COLLEGE
OF CHEMISTRY AND PHARMACY**

TRINITY SQUARE, BORO', LONDON, E.

Director—Mr. G. S. V. WILLS, F.L.S., F.R.S.,

Fellow of the Royal Botanic Society, &c.

ASSISTED BY AN EFFICIENT STAFF OF TEACHERS.

The Course of Lectures and Classes for the June and July Examinations has just commenced.

Gentlemen desiring to pass in July should enter this College AT ONCE.

EVENING CLASSES

For Minor and Preliminary Students are now being held on Tuesday, Wednesday, Thursday, and Friday evenings. Fees on application. Two passed at the last examination.

WILLS'S UNIVERSAL POSTAL SYSTEM.

FEES—Minor, £1 1s.; Major or Preliminary, 10s.

OPINIONS OF THE PRESS.

"Those who cannot attend a school of pharmacy will find the Universal Postal System train them in a way they should get."—*The Chemist and Druggist*.

"Mr. Wills, of Westminster College, one of our most thoroughly successful tutors, extends him a helping hand, leaving it simply his own fault, and deserving it, if he blindly labours on in ignorant darkness."—*Magazine of Chemistry and Pharmacy*.

For Prospectus, apply to

MESSRS. WILLS & WOOLTON

TO THE ELECTORS OF THE PHARMACEUTICAL COUNCIL.

HAVING been nominated for election to the Council of the Pharmaceutical Society, I beg to submit to you my views on questions affecting the trade of Chemist and Druggist.

I agree perfectly with the points put forward by Dr. C. R. Folor, that:—

1. Chemists and Druggists should be exempted from jury vice.
2. The word "person" in the Pharmacy Acts should include the plural number, also any Company or Corporation.
3. Penalties may be sued for by a private person.
4. In addition that:—
4. Chemists and Druggists should have the exclusive right of retailing patent medicines containing poisons.

If elected I would move on an early date that conferences of all Chemists and Druggists in the kingdom should assemble for the discussion of the above points and other matters. The Local Secretaries in the various towns would convene the meetings and send the resolutions and decisions arrived at to the Council. By these means the Council would ascertain the feeling of the vast majority of Chemists and Druggists, and so shape its policy; for it is my firm conviction that the Council must take its instructions from the people, if it is to accomplish anything satisfactorily, and must be the great bulk of the 13,000 Chemists at its back. The object of this line of policy would be to induce very many to now hold aloof to join the Society. I believe then that with patient, persevering effort many of the above-named reforms, if not all, would be accomplished in a few years.

Besides these reforms, there are other things which could be brought about for the benefit of the trade. I cannot enumerate more now than the following:—The law as to unqualified persons trading as Chemists and Druggists is only defied by many. This law must, therefore, be strengthened by increased penalties or otherwise.

The objection of the Glasgow Chemists to the Bill now before Parliament, that it would effectually prevent good men from entering the trade, they preferring a little more expense and a medical diploma, I can thoroughly endorse. Every week I sign certificates for Chemists, my own students, who are desirous of joining the medical profession; and should the Bill now before Parliament become law, the majority of those who would ordinarily enter the ranks of Chemists, and who could afford to obtain the medical qualification, would with contempt pass by the Chemist's diploma.

This would mean a serious difficulty as regards the supply of assistants, and not only that, but a number of men thus driven to the lower ranks of the medical profession would be dangerous opponents of existing Chemists in open shop.

Trusting you will carefully consider these important questions, and soliciting your vote and kind support,

I am, your obedient servant,

G. S. V. WILLS.

Westminster College.

To the Members and Associates of the PHARMACEUTICAL SOCIETY.

GENTLEMEN,—Having been nominated as a Candidate for a seat in the Pharmaceutical Council, I take the liberty of soliciting your votes at the ensuing election.

I have long been convinced of the necessity of bringing the Executive Body more into touch with its constituents, and thus increasing its efficiency for protecting and advancing the interests of the Profession, and should I be elected my best efforts will be devoted to bringing about that object.

One important subject which is likely to demand the consideration of the Council at an early date is the Pharmacy Acts Amendments Bill. While agreeing with the general principles of that Bill as introduced to the House of Commons, I think that many of its details are open to criticism, and it will be the duty of the Council carefully to watch the progress of the Bill through Parliament with a view to promoting such amendments as may be deemed necessary in the interests of the trade. The proposal to enforce a three years' Curriculum, for instance, is open to grave objection, and if carried into practice would undoubtedly be a great hardship to provincial students.

Should you elect me, I shall endeavour to discharge the duties devolving upon me with satisfaction to you and with credit to myself.

I am, Gentlemen, yours respectfully,

99 Botchergate, Carlisle, May 2, 1888.

ANTHONY NICHOL.

PUBLISHED BY J. & A. CHURCHILL.

Inorganic Chemistry (Based on the Manual of Fownes). By HENRY WATTS, B.A., F.R.S., Author of "A Dictionary of Chemistry," &c. With Coloured Plate of Spectra and 150 Wood Engravings. Crown 8vo, 9s.

Organic Chemistry (Based on the Manual of Fownes). By HENRY WATTS, B.A., F.R.S., Second Edition, by WILLIAM A. TILDEN, D.Sc., F.R.S., Professor of Chemistry in the Mason College, Birmingham. With Engravings. Crown 8vo, 10s.

A Systematic Handbook of Volumetric Analysis: or the Quantitative Estimation of Chemical Substances by Measure, applied to Liquids, Solids, and Gases; adapted to the requirements of Pure Chemical Research, Pathological Chemistry, Pharmacy, Metallurgy, Manufacturing Chemistry, Photography, &c., and for the Valuation of Substances used in Commerce, Agriculture, and the Arts. By FRANCIS SUTTON, F.C.S., F.I.O. Fifth Edition, Revised and Enlarged, with 90 Engravings. 8vo, 16s.

A Manual of Botany, including the Structure, Classification, Properties, Uses, and Functions of Plants. By ROBERT BENTLEY, F.L.S., Professor of Botany in King's College, and to the Pharmaceutical Society. Fifth Edition, with 1,178 Engravings. Crown 8vo, 15s.

LONDON: 11 NEW BURLINGTON STREET.

HAWLEY'S COUNTER ADJUNCTS

A selection of reliable preparations, with artistic labels, bearing Chemist's own name and address. Second Edition, enlarged, with lowered Prices, free on application.

Hawley's preparations supplied in bulk.

LESCHER'S Recent Materia Medica

By F. HARWOOD LESCHER, F.C.S., &c.

The Second Edition of the Work contains, in a condensed form, all known information upon recent Materia Medica. It will prove of the greatest value to the Chemist or Practitioner, as the whole of the matter is conveyed in a clear and well-digested form. The book also contains an excellent Therapeutic Index, so that the diseases for which the new remedies may be used are seen at a glance.

Price, 2s. 6d.; Post free, 2s. 8d.

**EVANS, LESCHER & WEBB,
LONDON.**

Liverpool:

EVANS, SONS & CO.

Montreal:

EVANS, SONS & MASON
(LIMITED).

AGENTS:

JAMIESON & Co., 263 George St. (opposite Bond St.), Sydney.

AND THE PUBLISHERS:

J. & A. CHURCHILL, 11 New Burlington St., W.

May be had on application, enclosing Business Card.

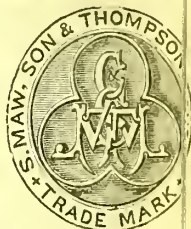
S. MAW, SON & THOMPSON'S



QUARTERLY

Price Current

AND



BOOK OF ILLUSTRATIONS

OF

SURGEONS' INSTRUMENTS & APPLIANCE

INSTRUMENTS, &c., FOR VETERINARY PURPOSES.

DRUGGISTS' APPARATUS, IMPLEMENTS, UTENSILS

And other Requisites employed in Pharmacy and the Dispensing of Medicines.

MEDICAL GLASS AND EARTHENWARE.

SHOP FITTINGS, SHOW CASES.

SPECIE JARS, SHOW BOTTLES.

LINT AND SPREAD PLASTERS.

HAIR, TOOTH, AND NAIL BRUSHE.

TOILET AND SMELLING BOTTLES

FEEDING BOTTLES.

Proprietary Articles, Perfumery, and

DRUGGISTS' SUNDRIES OF ALL KINDS

MANUFACTURED AND SOLD BY

S. MAW, SON & THOMPSON, ALDERSGATE STREET, LONDON

FORWARDED POST FREE TO ALL PARTS OF THE WORLD.

Chemists and Druggists not receiving the above who are desirous of doing so, are requested to make application enclosing Business Card on receipt of which their names will be placed on the Register for a future issues.

JAMES TOWNSEND, MEDICAL LABEL PRINTER, EXETER.

THE LATEST
TOWNSEND'S
NEW ILLUSTRATED

HANDBILLS
SEND FOR SAMPLES.

CHEMISTS' SLIP LABELS, FROM 1/- 1000

BILLLEADS
CAR PRICE LISTS
CIRCULARS
POWER ENVELOPES
PRESCRIPTION DITTO.
TOOTH BRUSH DITTO.
VERMIN KILLER DITTO.
GOLD PAPER LABELS

HANDBILLS
LINSEED MEAL BAGS
MEMORANDUM FORMS
POISON REGISTERS
SYPHON REGISTERS
POSTAL BOXES
PRESCRIPTION BOOKS
WRAPPING PAPERS.

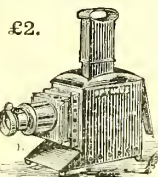
JAMES TOWNSEND, MEDICAL LABEL PRINTER, EXETER.

PERKEN, SON & RAYMENT

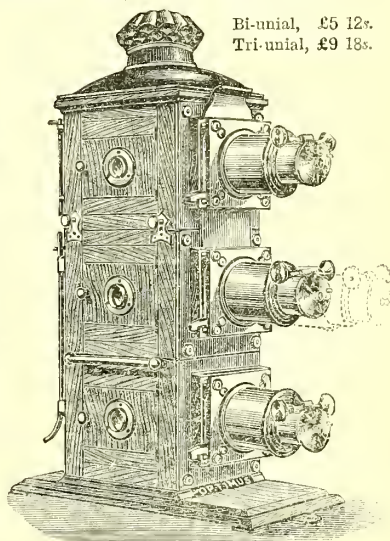
Established 1852. Manufacture for the Trade only. Catalogue free.

MAGIC LANTERNS,

SLIDES, GAS BAGS, JETS, AND ACCESSORIES.



£2.
4-inch Condenser.
3-wick Lamp.
Portrait Front Lens.



Bi-unial, £5 12s.
Tri-unial, £9 18s.

12,000

Superior Hand-painted
**MAGIC LANTERN
SLIDES**

at very reduced prices,
the productions of
CARPENTER & WESTLEY,
Regent St., London,
who desire to reduce
their very large stock.

101 HATTON GARDEN, LONDON, E.C.

Telegraphic Address—"OPTIMUS" Registered Trade Mark.

FORD, SHAPLAND & CO.

MEDICAL LABEL & GENERAL PRINTERS, ENGRAVERS, &c., 6 GREAT TURNSTILE, LONDON, W.C.

COLOURED COUNTER BILLS,

Printed in Colours, and specially designed for Chemists' Advertising. A Great Novelty.

CHEMISTS' COUNTER BILLS,

On GOOD WHITE PAPER, at LOWEST PRICES ever offered.

10,000 Crown 8vo. Bills (7½ in. × 5 in.) **12/0**

10,000 Demy 8vo. Bills (9 in. × 5½ in.) **17/6**

ALL OTHER SIZES AT EQUALLY LOW RATES. SAMPLES AND PRICES ON APPLICATION.

CHEMISTS' FLY PAPERS,

Chemically prepared and guaranteed to be thoroughly effectual; printed with own name and address and advertisements on the four sides. Specimens and Prices on application.

TYPE WRITING FOR THE MILLION.

THE UNIVERSAL "SIMPLEX" TYPE-WRITER.

ONLY 10/6 ONLY

IT IS NOVEL AND SIMPLE, AND CAN BE WORKED BY A CHILD.
IT IS THE SMALLEST, CHEAPEST, AND MOST PORTABLE MACHINE EVER INVENTED.

A Chemist's opinion of the use of the Type Writer for Dispensing Labels.
Mr. A. TAYLOR says that "Labels written with the 'Universal 'Simplex' Type-writer' have the following advantages:—Plainness, neatness, and cannot be known who wrote them, customers being apt to regard a mixture with distrust with directions written in a hand they have not been used to."—THE CHEMIST AND DRUGGIST, August 13, 1887.

PERFECTLY RELIABLE AND TRUSTWORTHY. CAN BE LEARNED IN TEN MINUTES.
INVALUABLE FOR TRAVELLING.

THE UNIVERSAL "SIMPLEX" TYPE-WRITER, LD., 56 Queen Victoria St, London, E.C. AGENTS WANTED

CHEMICAL AND SCIENTIFIC APPARATUS.

J. ORME & CO.

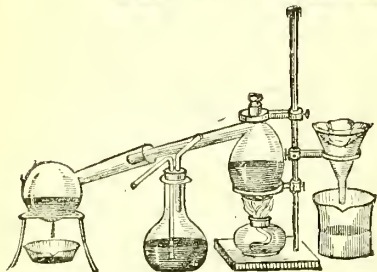
(Late M. JACKSON & CO.),

Manufacturers and Importers of every description
of Apparatus for Lecturers or Laboratory use.

By Appointment to H.M. Hon. Board of Inland Revenue, Science and
Art Department, Royal School of Mines, Trinity House,
Pharmaceutical Society, &c.

ILLUSTRATED PRICE LISTS ON APPLICATION.

65 BARBICAN. LONDON E.C.



TRADE MARKS, LABELS, PATENTS,
DESIGNS, &c.

A. G. PRITCHARD

47 Lansdowne Gardens, LONDON, S.W.

CHEMISTS and DRUGGISTS will effect a saving of fully
50 per cent. by Registering through this Agency.

WRITE FOR PRICE LIST & REFERENCES.

American Correspondence solicited.

Now ready, price 2s. 6d.

AN EPITOME OF
THE LAW AND PRACTICE
CONNECTED WITH

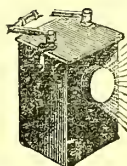
PATENTS FOR INVENTIONS.

With a Reprint of the Patent Acts of 1833, 1835, and 1836, and Rules and a
Summary of the Patent Laws of Foreign Countries and British Colonies
By JAMES JOHNSON, Barrister-at-Law, and J. HENRY JOHNSON,
Assoc. Inst. C.E., Solicitor and Patent Agent, Authors of "The Patent's
Manual."

London: LONGMANS, GREEN & CO., Paternoster Row

Price 43 carriage paid
to England.

Prepared by the FRISTER U. ROSSMANN COMPANY, Berlin



ELECTRIC

PORTABLE SAFETY LAMP

As simple as an ordinary Lamp. 24 hours light
from one charge for 5d. Write to the

PATENTEE, ALBERT FRIEDLAENDER, ELECTRICIAN,
BERLIN, W.G.

VALUABLE & INTERESTING TO EVERYBODY COMPRESSED HOPS.

Best Hops compressed into small parcels of one pound and half-pounds, and sent out in cases containing 30 lbs. each.
These Hops are specially selected and compressed for keeping purposes, and will retain their aromatic strength for considerable time.

They are introduced to the Public to enable them to make their own BITTERS, YEAST, HOME BREWING,
and numerous other purposes. Full particulars given on each packet.

SAMPLES AND PRICES SENT ON APPLICATION TO

A. WILKINSON & SONS, 27 DERBY LANE, OLD SWAN, LIVERPOOL.

P.S.—Chemists will naturally see the great advantage in making their own Bitters from the Pure Hop itself.

HIGH-CLASS PERFUMERY

"Messrs. J. ATKINSON & Co.'s
PERFUMES are in aroma and
strength particularly fine."
Chemist & Druggist,
Jan. 29, 1887.

J. ATKINSON & CO.

Proprietors of the
REGISTERED

"ZENITH"
BRAND PERFUMES.

Samples and quotations on application,
at their only address,

5 FINSBURY SQUARE, LONDON.

"CYMRY AM BYTH."



REGISTERED.

ELLIS'S RUTHIN WATERS.

ASK FOR ELLIS'S.

CAUTION.—Corks branded "R. ELLIS & SON, RUTHIN." Every Label
is Registered, and bears Name and Trade Mark (Goat on Shield).

SOLE ADDRESS—R. ELLIS & SON, RUTHIN,
NORTH WALES.

London Agents: W. BEST & SONS, Henrietta Street, Cavendish Square

VOID CAPSULED PILLS

DOZ. BOTTLES		In this form the ingredients are not only perfectly preserved, but do not affect the teeth, or offend the palate, and, further, can be conveniently kept out of sight by those who object to be regarded as invalids.	DOZ. BOTTLES	
containing	containing		containing	containing
25 PILLS.	100 PILLS.		25 PILLS.	100 PILLS.
7/	24/	Elatrine	13/	47 6
7/	24/	Ipecac. Powdered	5/	16/
5/	16/	Iron, Arseniate	5/6	18/
6/	20/	Mercury Bi-Iodide	5/	16/
7/	24/	" Proto-Iodide (absolutely pure pre-		
11/	39 6	cipitated)	7/	16/
7/	24/	" Proto-Iodide	5/	16/
7/	24/	Morphine, Muriate	7/	24/
		"	9/	32/
7/	24/	Nitro-Glycerin	7/	24/
5/	16/	"	7/	24/
5/	16/	Picrotoxin	7/	24/
7/	24/	Podophyllin	5/	16/
7/	24/	"	5/	16/
6/	20/	" P	5/6	18/
6/	20/	Quinine, Bi-Sulphate	5/	16/
6/	20/	"	5/6	18/
7/	24/	" Sulphate	5/6	18/
9/	32/	"	6/	20/
5/	16/	Strychnine	5/	16/
5/	16/	" Nitrate (Dipsomania)	5/	16/
5/	16/	Zinc Phosphide	7/	24/
5/	16/	"	9/	32/
7/	24/	" Valerianate	8/6	30/

Messrs. BURROUGHS, WELLCOME & CO., Snow Hill Buildings, London, E.C.; and
Messrs. HOCKIN, WILSON & CO., 33 Duke Street, Manchester Square, London, W.

THE
TOP BITTERS COMPANY
(LIMITED)

Have introduced a 2/6 size Bottle,
which is in great demand.

Send to your Wholesale Dealer for
price, and put in Stock.

RETAIL PRICES in FUTURE, 2s. 6d. & 4s. 6d.

EXCHANGE COLUMN.

This section of "The Chemist and Druggist" must be closed for press by Thursday noon of each week. Remittances payable to EDWARD HALSE.

TERMS.

Advertisements in this department must be paid for in advance. From this rule no deviation can be made. Insertions are charged at the rate of 1d. per word, provided the advertiser attaches his name and address, for each word of which he must also pay at the same rate; or if he pays 1 per word, his name and address will be registered and a figure attached to his advertisement. All correspondence referring to that figure must be addressed to "The Publisher of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C., and the figure must be distinctly endorsed upon the envelope. Letters will then be forwarded to their proper destination. A price is counted as one word, as e.g., £1 10s. 6d.

DEPOSIT OF MONEY.—In order to ensure safety we offer the following system:—The purchaser of anything advertised in the Exchange Column may remit the amount to us, accompanied by a commission of 6d. if the amount is £3 or under; and 1s. if over that sum. We acknowledge receipt of deposit to both parties, and hold the money until we are satisfied that either the goods are returned to their original owner or the purchase is completed.

Postal orders and cheques sent as deposit must be made payable to Edward Halse, and crossed "Martin & Co."

FOR DISPOSAL.

Apparatus.

A new Pindar's pill-machine, with piping press complete, cost 10l. 10s., to be sold for a reasonable offer. Apply, Samuel Downing, 59 High Street, Braintree.

For sale (cheap), almost complete set of apparatus and chemicals, including six dozen stoppered bottles, Leclanche's battery, retorts, weights, pestle and mortar, &c., &c.; suitable for beginner. Newberry, 3 Glyn-rondra Street, Cardiff.

Dental.

What offers in cash for stone filter (silicated carbon), 2-gallon, quite new, cost 16s.; 3-pint wire-covered gasogene; new set of Bell's sealing and stopping instruments in case, cost 48s.; new ether spray for dental use, cost 18s. 6d.? R. Esam, 13 St. Stephen's Road, Leicester.

Drugs and Chemicals.

Hay saffron, 3s. 9d. per ounce, post free. Arthur, Chemist, Yarmouth.

Aloes barb. opt., 1s. 4d. lb.; senna (good), 3d. lb.; cas. lenon opt., 4s. 6d. lb.; camomiles, 6d. lb.; rad. rhei, E. I., 1s. 7d. lb.; small lots of gum 7d. to 1s. lb.; fine gum Benjamin, 1s. 9d. lb.; patents, 1s. 1d. at 8s. 6d. doz., 2s. 9d. at 21s. doz.; 2 oz. ol. cubeb, 3s. oz. Pharmacy, 63 Downs Park Road, Hackney.

Formulæ.

Reliable recipes, 6d. each; full set of 130, neatly copied in book, 7s. 6d.; send for list. "Chemist," Edwards, Wye, Kent.

Enormous reduction.—Brooks's reliable recipes will now be 7d. each, 3 for 1s. 6d., 12 for 5s., post free; full instructions. Following recommended as trial: "Tie Specific," "Corn Cure," "Glycerine Cream," "Rheumatic Embrocation," "Liver Pills," "Blood Cleanser," "Liq. Copaiba," &c., "Ringworm Specific," "Liq. Santal. Flav.," &c., "Jubilee Sance," "Cold Cream," "Hop Tonic," "Toothache Remedy," "Furniture Cream," "Brass Paste," "Brush Polish," "Nursery Pomade," &c. List free. T. Brooks, Chemist, Louth.

Educational.

Botany.—The Indigenous Official Plants of the Pharmacopœia, mounted on cardboards, only 7s. 6d.; or paper 5s. Higginson, Newferry, Birkenhead.

Literature.

Sixteen volume of *Pharmaceutical Journal*, bound in boards and leather backs, 1841 to 1857; what offers? Wardley, Tonbridge.

Chemist and Druggist, 1837-7; *Diary*, 1832-3; Year-book, 1880-6; *Pharmaceutical Journal*, third series complete. Coates, 8 Abercromby Place, Edinburgh.

Soda-water Machinery.

Mineral water plant (small); all piping connection complete; highly finished; silver plated cylinder and fittings; quite new; cheap; never been used. Husband, Wine Merchant, Stoke Newington.

Proprietary Articles.

21 3s. 6d. Wilson & Kitchen's sheep dip, in good condition, 1s. 9d. each, the lot 35s. Street, Chemist, Louth.

Two 1s. 1d. Brown's vermifuge comfit, for 1s.; 2 2s. 9d. Lambert's asthmatic balsam, 3s.; 3 1s. 1d. Ede's eye liquid, 1s.; 4 1s. 1d. Hooper's pills, 2s.; 4 1s. 1d. Spencer's pulmonary elixir, 2s.; 4s. 6d. Murray's specific, 2s.; 2s. 9d. Frank's specific 1s. 4d.; 2 4s. 6d. Phelps Brown's blood purifier (wrappers soiled), 2s.; 2 4s. 6d. Brown's liver invigorator, 2s.; 4s. 6d. restorative assmilit, 1s.; 2 4s. 6d. Maw's pill coater, 13s. 6d. (carriage paid). Peebles, Chemist, Kirkcaldy.

Shop Fittings.

Counter scales, Fig. 1, Maw's book; 12-in. beam stand, 20 by 10, with drawers; brass balance, 25s. Gulliver, 6 Lower Belgrave Street, S.W.

Nest of 42 mahogany-fronted drawers, 6 feet 6 in. by 4 feet 4 in., gold labelled, with three lockers under and mahogany coverboard over drawers, 3l. Kitson, Chemist, Worcester.

Show-jar, Arrowroot, National arms, height 24 inches, exclusive of gilt cover, price 25s.; less than half cost; equal to new. Done, Coventry Road, Birmingham.

20-ft. run second-hand mahogany-fronted drawers, gold labels and glass knobs, mahogany-fronted shelving, wall cases, counters, mahogany tops; 6 6-gallon carboys, 1 8-gallon ditto, 2 3-gallon, cut stoppers, dispensing-screens, blue ointment jars, bottles, desks, &c., &c., to be sold, very cheap. Note the address, Natal Bros., 45 Old Street, Goswell Road, London, E.C.

Specie jar, largest ever painted with Royal Arms and Coronet, cover, 3 feet high, very handsome, 75s.; 2 to match, 30 in., 35s. each; 2 24 in., painting faulty, 15s.; 10 assorted, 18 in. high, from 5s.; 12 doz. shop-rounds, 7s. 6d. doz.; 2 6-gal. pear-shape carboys on stands, cut stoppers, 18s. each; 3 cylindrical ditto, 15s.; also shop-fittings, comprising counters, show-cases, and drawers, N. 184 Aldersgate Street, E.C.

Second-hand Mahogany Fittings.—Plate glass wall case, 8 ft. 9 in. wide, 8 ft. 11 in. high; 1, 9 ft. wide, 9 ft. 2 in. high, sheet glass; 1, 6 ft. 9 in. wide, 4 ft. 3 in. high, elliptical on plan, bent plate case; mahogany counter, 11 ft. 10½ in. with 9 drawers and till; Spanish mahogany counter, 6 ft. 8½ in.; bent-plate counter cases—1, 30 in. OG. with glass shelf; 1, 52½ in., lifting flaps, with shelves behind; 1, 30 in. ebonised; dispensing screen, 5 ft. 4½ in., silvered-plate panel; plate-glass fascia, "Pharmaceutical Chemist," 146½ in. by 14 in.; 3 15-in. marble mortars; various specie jars, carboys, rounds, ointment pots, black uprights; remittances with orders. Hawke & Son, Wild Court, Great Wild Street, London.

Miscellaneous.

Two dozen Khoosh bitters, 4s. size, 27s. 6d.; eighteen 40-gallon casks colza oil, 3d. gallon. Harrop, Middleton, Manchester.

Microscopic objects; hundreds cheap, including gorgeous polarising crystals; list free. Henry Ebbage, Framlingham, Suffolk.

Tricycle, Rudge's rotary, centre gear ball bearings, plated, easy runner, 8½ l. or exchange. Webster, West Bromwich.

Taken for debt; good gold lever watch, 6s. or my own, nearly new, silver, 3l. 10s. or exchange for tricycle. Doubleday, Dealing.

Stoneware percolator, two gallon, almost new, 18s.; sketch forwarded. McKee, Chemist, Tunstall, Staff.

Toothbrush cases; what offers for two aw's figs. A 9 and A 10; in good condition, 21s. 3d.

4-oz. bottles essence rennet, 3s. doz.; 8-oz. bottles essence rennet, 6s. doz., cash; carriage paid to Glasgow on 3 dozen. Cnic, Campbelltown.

Quantity of snrplis patents for sale, cheap also Hollenhead's standard paint mill (3 3), new, price 35s. 19 Moseley Road, Birmingham.

Nine one-gallon and 6 half-gallon tins lup's sheep-dip, 5s. and 2s. 6d., price 30s. 10d.; three 10-lb. tins McDougall's dip, 18d., price 10s. 6d. Fitton, Chemist, Hert. d.

2 new Spamer's batteries, Maw's list, cost 25s. each; 1 ditto, cost 42s.; what reasonable offer, or acid, tart. pulv. or borax exchange? Norris, Chemist, Burton-on-ent.

Genuine Humber tandem tricycle, nearly new; converts into single if required; undelivered hest machine made; ill-health cause selling. Full particulars, Osborne, Chemist, Moss Side, Manchester.

Offers wanted for whole plate Spanish many camera, combination lenses, by Jaminiaris, for portraits, groups, landscapes, & cost 18l.; ½-plate camera and lense complete, cost 8l.; medicine chest, similar to aw's No. 11, page 496; mahogany bath tender, cost 32s.; photographic sundries; 1 peculiar; 8 new trusses, Maw's No. 17; 8 waterbury watches, 10s. 6d. series; 2 tons other oil, half list price; soiled 10 tons, list free; half retail. Heaton, Sileby, Loughborough.

WANTED.

Bentley's "Mammal Botany," 5th edition; cheap. "Cryph," 185 High Street, Peckham.

Dental gasometer, 8 or 12 gal., with face piece and all complete, in perfect working order.

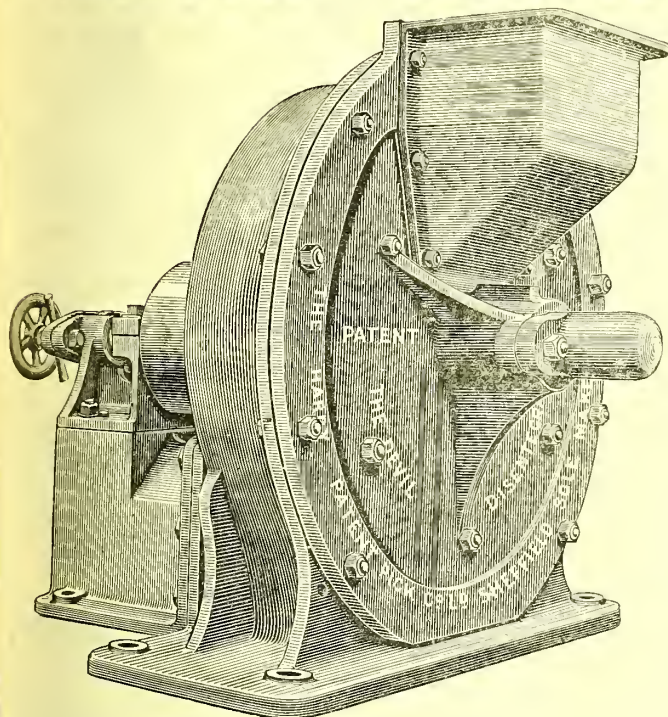
J. Young, 28 North Parade, Halifax.

Earthenware leech show-vase; give send particulars; reprint of B. P., 1835. Young, 210 Camp Hill, Birmingham.

Index for 1885 *Chemist and Druggist*. A new, stating price, to R. Duggan, 6 Dnli Summer Hill, Dublin.

Old gold, platinum, silver, or dental metal; utmost value in cash, or high-class mechanical work. Entwistle, Dentist, Shaw Street, Liverpool.

THE "DEVIL" DISINTEGRATOR



Will Grind, Granulate,
or Shred any Material,
Animal, Vegetable, or
Mineral.

The following is an unsolicited Testimonial from a firm of Dry Soap Manufacturers, who have tried various other makes of Disintegrators without success:—

“April 28, 1888.

“We are quite satisfied with your Machine, and in all probability will require another and larger one. Let us know the cost of one as large again as the one we have.”

The Machine referred to is one of our smallest Machines (price £30), and is grinding 2 to 3 tons of material per hour.

The following table gives some information as to the quantities of various classes of material the Machines will deal with per hour.

MATERIAL	No. 1 SIZE MACHINE	No. 2 SIZE MACHINE	No. 3 SIZE MACHINE
Coal Dust	10 cwt.	20 cwt.	50 cwt.
„ (for Briquettes)	20 „	40 „	200 „
Lead Ore	30 „	60 „	140 „
Slate	20 „	25 „	50 „
Bones (Dry) Fine	10 „	20 „	50 „
„ „ Medium	15 „	35 „	90 „
„ „ Coarse	20 „	40 „	110 „
„ (Green)	3 „	6 „	15 „
Hoofs and Horns	2½ „	8 „	20 „
Rags	—	2 „	5 „
Indian Corn	5 „	15 „	40 „
Wet Clay	—	20 „	50 „
Oak Bark	—	15 „	30 „

Purchasers should compare the quantities of material ground per hour with the capacity of other Machines. There is no other Grinder that will deal with anything like these quantities in the same time.

No.	PRICE	Belt required	Diameter of Pulley	Revolutions per Minute
1	£30	3 inches	8 inches	1,000
2	£60	5 „	12 „	900
3	£90	7 „	14 „	800

The chief feature of this Grinding Machine is that it combines the centrifugal with the grinding action, and it can be adjusted to grind to any degree of uniform fineness while in motion.

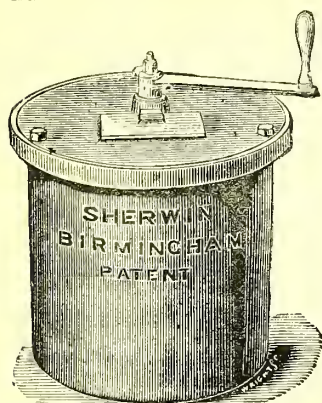
No Screens or Grates are required. Will Grind Wet or Dry Material, Clogging being impossible.

Samples of material forwarded to us may be passed through the Machine in the presence of intending purchasers or forwarded by rail.

SOLE MAKERS:

The **HARDY PATENT PICK CO., Ltd.**

Engineers and Mining Tool Makers, **SHEFFIELD.**



THREE SIZES LIKE THIS,
£1 to £3 10s.

SHERWIN MIXERS

Are unequalled for
mixing all kinds of dry
powders.



FOUR SIZES LIKE THIS
£7 to £30.

CHEMISTS' OPINIONS.

A BIRMINGHAM CHEMIST'S:—

"A splendid contrivance, and one absolutely indispensable to any chemist. I have used it for horse, tooth, and other powders, also lemon kali."

A LONDON CHEMIST'S:—

"The Mixer and Screen supplied are admirable, both for strength and practical use."

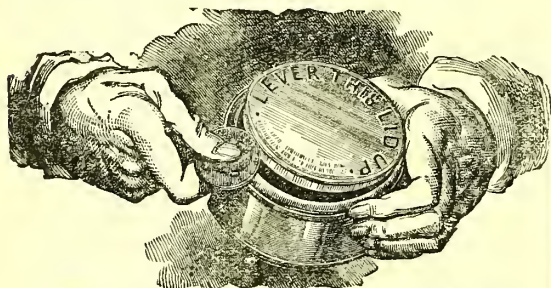
GEORGE E. SHERWIN, 192 ALMEH ST., BIRMINGHAM.

THE SELF-OPENING TIN BOX COMPANY

(GRIFFIN'S PATENT).

ALBION TIN WORKS, YORK ROAD, KING'S CROSS, LONDON, N.

Telegraph Address—"TIN BOX LONDON."



Boxes ready made up, or the Patent Tops only (ready for making up), are supplied.

THE NEW TIN BOXES for all kinds of Hermetically Sealed Preserved Foods, DRUGS and CHEMICALS

THE NEW TIN BOXES are as cheap as the ordinary Boxes, require no soldering up, and can be opened with a piece.

THE NEW TIN BOXES are best adapted for the largest Food-preserving Houses and CHEMISTS, to whom references can be given.

THE NEW TIN BOXES are also perfect for Coffee Canisters, Biscuit Boxes, Confectionery, Paints, Varnishes, Soaps, &c.

THE NEW TIN BOXES are described by the Standard, Chronicle, Illustrated News, Engineer, Grocer, Oil Colourman, and Press generally, as the "neatest and most elegant invention ever made."

CAUTION.

IN THE HIGH COURT OF JUSTICE, CHANCERY DIVISION

GRIFFIN v. NOAKES. 1887. G. No. 1,088.

GRIFFIN v. FRAVER. 1887. G. No. 1087.

As we understand from some of our Clients that, from false representations made, an impression prevails that the proceedings in these actions have failed, we beg to inform the public that such is not the fact, and that the proceedings are being carried on as fast as possible, in the Chancery Division of the Court, to restrain the Defendants from selling or making Tins similar to those manufactured by us, and from infringing our Patent. The Defendants, pending the proceedings, have been ordered by the Court to keep an account of all sales made by them. Our Solicitors, Messrs. CLARKSON, GREENWELL & Co., have had instructions from us to proceed against all persons so offending.

FOR THE SELF-OPENING TIN BOX COMPANY, G. FEATHERSTONE GRIFFIN, Manager.

EIGHT PRIZE MEDALS AWARDED.

GOODALL'S HOUSEHOLD SPECIALITIES.

Yorkshire Relish

THE MOST DELICIOUS SAUCE IN THE WORLD.

On chops and Steaks, Fish, &c., it is incomparable. In Bottles, 6d., 1s. and each.
CAUTION.—On each Yorkshire Relish Label is a Willow Pattern Plate and the GOODALL, BACKHOUSE & CO. No other is genuine.

Goodall's Baking Powder

THE BEST IN THE WORLD.

For delicious Puddings without Eggs, Pastry without Butter, and for light Bread without Yeast. In 1d. Packets; 6d., 1s., 2s., and 5s. 1.

Goodall's Quinine Wine

B.P.

The best, cheapest, and most agreeable tonic yet introduced. In Bottles, 6d., 1s., and 2s. each.

Goodall's Custard Powder

For making delicious Custards without Eggs, in less time and at half the price. Sold in Boxes, 2d., 6d., and 1s. each.

Goodall's Blanc Mange Powder

Is acknowledged by all to be the most convenient and economical preparation ever introduced, as, by its use, a most Rich and Delicious Blanc-mange may be produced in a few minutes at a trifling cost, and may be made in various flavours, i.e., Raspberry, Strawberry, Lemon, Almond, and Vanilla. Sold in Packets, 6d. and 1s. each.

Goodall's Egg Powder

Is acknowledged to be the only real substitute for eggs yet discovered. Its action on Cakes, Puddings, &c., &c., resembles that of the egg in every particular, enriching them in colour and flavour, rendering them most wholesome and nutritious. One sixpenny tin will go as far as twenty-five eggs. In 1d. Packets; 6d., 1s., 2s. Tins.

SOLE MANUFACTURERS—

GOODALL, BACKHOUSE & CO.
WHITE HORSE STREET, LEEDS.

A monthly Price List of Druggists' Sundries, Patent Medicines, &c., can be had Post Free on application.

TYRER'S SAUCES AND "BOROUGH" KETCHUP

GOOD
VALUE

THE GIANT 1d. BOTTLE OF SAUCE.

LARGEST IN THE TRADE.

In Half-Gross Boxes, at 6/6 per Gross.*

"BOROUGH" KETCHUP, WORCESTER, HARVEY, YORKSHIRE, OR READING SAUCE.

1d. Sample Bottles, dozen parcels	per gross 5/	extra quality 6/
1/2 gross boxes	5/6	6/6
1d. Giant Bottles, dozen parcels	6/	8/
1/2 gross boxes	6/6*	8/6
1/2 Bottles (flat or round), reputed 1/2-pint	16/	24/
1/2 Bottles (flat or round), reputed pint	26/	32/
1-pint Imperial Round Stoppered Bottles	30/	36/
1-pint Imperial	50/	60/
12 1/2-gallon Casks (casks free)	each 20/	32/

ROYAL CAFÉ SAUCE.

In 8-oz. square-stoppered bottles, 48/ per gross.

A rich, fruity Sauce of fine flavour, and worth especial attention, as being the most saleable in the market.

Samples of any kind sent Free of all Cost by

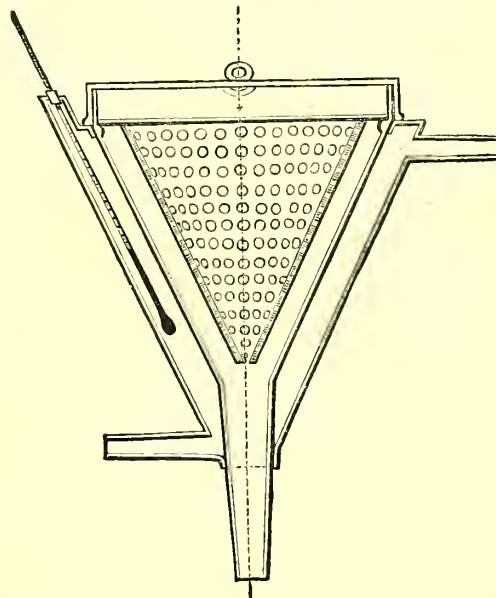
PETER TYRER,
The "Borough" Ketchup and Sauce Maker,
70 LONG LANE, BOROUGH, LONDON, S.E.

SCOTCH AGENCY: 113 WEST NILE STREET, GLASGOW.
Also Sold by W. & C. PANTIN, Upper Thames Street, LONDON, E.C.
BURGOYNE & CO., 16 Coleman Street, London, E.C.
JOS. TRAVERS & SONS, 119 Cannon Street, London, E.C.

Bronze Medal, Universal Cookery Exhibition, London, April, 1888.

NICKEL'S PATENT DOUBLE FILTERING FUNNELS

In Porcelain or Metal, for rapid filtration, thorough washing of precipitate analysis, filtration of volatile liquids, without any loss from evaporation.



These Funnel are now made jacketed, and with air-tight lids, so that the temperature of the liquid to be filtered can be regulated at between freezing and boiling points without coming into contact with the air.

For full particulars, with testimonials, press notices, and prices, apply to
Messrs. NICKELS & CO., Chemical Engineers, 150 Holborn, E.C.
and Analysts,

TOWER TEA.

INJUNCTION.

IN THE HIGH COURT OF JUSTICE, Chancery Division, on the 23rd July, 1887, the case of *THE GREAT TOWER STREET TEA COMPANY, Limited, versus LANGFORD & CO., Plymouth*, was decided. Mr. Justice Stirling (without calling upon Counsel for the Plaintiffs to reply) gave judgment in favor of *The Great Tower Street Tea Company, Limited*, and granted a Perpetual Injunction, with costs, restraining the Defendants from packing their Teas in the manner complained of, or in such way as would lead the public to suppose they were the Teas of the Plaintiffs.



Tower Tea

Registered Trade Marks, Nos. 44,027 and 43,992.

THE ABOVE TRADE MARKS APPEAR ON EVERY PACKAGE.

THE GREAT TOWER STREET TEA COMPANY, Limited, is resolved to protect its Agents in every part of the country, and has instructed its solicitors to proceed in the most peremptory manner against all persons infringing upon its rights. This valuable Agency is a certain source of income—the public ask for the Tea, and the Agent will improve their standing by pushing it.

TOWER TEA is a standard quality. It is widely advertised. Absolutely NO RISK to Agents.

APPLICATIONS FOR THE AGENCY for the Sale of Tower Tea will have prompt attention.

THE LONDON BROKEN TEA	for retail at	1/8
ASSAM CONGOU, New Season's Whole Leaf Tea	„	1/8
THE LONDON TWO-SHILLING TEA	„	2/0

THE GREAT TOWER STREET TEA CO., L.
3 JEWRY STREET, LONDON, E.C.

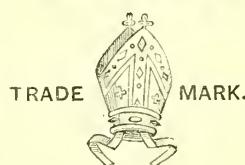
MITRE TEA.

COMFORT & PROLONG YOUR EXISTENCE

BY DRINKING

MITRE
TEA.

MITRE
TEA.



Mitre "Broken Leaf"	s. d. 1 4
Mitre "Broken Am. Pekoe" ...	1 8
Mitre "Thrift" (whole leaf)	1 8
Mitre "Kee-Mun" ...	2 0
Mitre "Amgoorie" ...	2 6

Mitre "Broken Leaf"	s. d. 1 4
Mitre "Broken Am. Pekoe" ...	1 8
Mitre "Thrift" (whole leaf)	1 8
Mitre "Kee-Mun" ...	2 0
Mitre "Amgoorie" ...	2 6

Fac-Simile of Show Card distributed Gratis to all Agents.

Specially Selected Agents. Wrapped in $\frac{1}{4}$ -lb., $\frac{1}{2}$ -lb., & 1-lb. Parcels.

VALUABLE AGENCY.

Framed Show Cards, Enamelled Iron Tablets, Posters, Window Transfer, and Handbills with Agent's Name on supplied free. Newspaper and Railway Station Advertisements to suit the requirements of Agents. Applications for Agencies where unrepresented will receive prompt attention. Price Current and Pamphlet, with Terms, post free.

PEARLEY & TONGE, MITRE SQUARE, LONDON, E.C.
ALD GATE,

HOLBROOK'S WORCESTERSHIRE SAUCE

HOLBROOK'S LONDON RELISH

HOLBROOK'S PURE PICKLES

THE BIRMINGHAM VINEGAR BREWERY COMPANY, Limited, have for many years been the Sole Manufacturers of these articles.

The attention of the Company having been drawn to certain advertisements and other documents which have been circulated in the Trade, that the Public are invited to purchase these articles from persons other than the BIRMINGHAM VINEGAR BREWERY COMPANY, Limited, the BIRMINGHAM VINEGAR BREWERY COMPANY, Limited, have already commenced legal proceedings to protect the exclusive rights which they claim to these articles. The Public and the Trade are warned that any of the above articles purchased under this Brand from any Manufacturers except the BIRMINGHAM VINEGAR BREWERY COMPANY, Limited, will not only be spurious, but may expose the person retailing the same to the risk of being made Defendant to legal proceedings.

HESELTINE'S

THE PREMIER TEA OF INDIA AND CEYLON



IS THEIR SPECIAL
IMPORTATION
AND THE PERFECTION
OF TEA.

"TAPRABUNDA"

REGISTERED TRADE MARK.

FOR RETAIL AT

1s. 8d., 2s., and 2s. 6d.

In Lead Packets, ¼-lb., ½-lb., & 1-lb.

Terms of Agency, and Samples of
the Tea, on application.

OFFICES AND DUTY-PAID WAREHOUSES.

WM. HESELTINE & SON,

56 Wilson Street, and 1 & 3 Earl Street, Finsbury, LONDON, E.C.

AGENTS WANTED WHERE NOT ALREADY REPRESENTED.

DESIRABLE & PROFITABLE AGENCY FOR CHEMISTS.

SPRING BLOSSOM CEYLON TEA.

Packed in three qualities, in handsome and attractive packages, and sent out in cases containing 40 lbs. each, to hold one size only, either 1 lb., ½ lb., or ¼ lb. Air-tight Tin Canisters, to sell retail at 2s., 2s. 6d., and 3s. per lb. Quarter Pound Samples on receipt of Stamps.

Term-Cash, less discount of 3d. in the £, carriage paid, or Two months net on receipt of satisfactory London references.

Our Fortnightly Price Current Post Free on application.

CAE, JOHNSON & CO., WHOLESALE TEA AND **8 LIME ST., LONDON, E.C.**
COFFEE DEALERS,

BANKERS—WILLIAMS, DEACON & CO.

[2]

N.B. This Tea being packed in Air-tight Tin Canisters is not liable to be deteriorated by the flavour of any other foreign substance.

ROBERT GIBSON & SONS,

MANUFACTURERS OF HIGH-CLASS LOZENGES OF EVERY DESCRIPTION,

JUJUBES, BOILED SUGARS, COMPRESSED PELLETS, &c., &c.

Shipped through London Houses to all parts of the World. Price Lists sent on application to the Works,

ELSKINE STREET, HULME, MANCHESTER ENGLAND.
LONDON DEPOT—1 AUSTRALIAN AVENUE.

"MORNIE."

LIEBIG'S

Extract of Meat.

As supplied to the War Office.

1-lb. 3/2	per lb.	6/2	per doz.	74/0	2-oz. Jars	per lb.	7/0	per doz.	10/8
1-lb. 3/4	"	6/4	"	38/0	1-oz. Jars	"	7/8	"	5/8
4-oz. 3/4	"	6/7	"	19/9	½-oz. Jars	"	8/0	"	3/0

Write for Detailed Price List to the Australian Meat Co., 9 and 11 Fenchurch Avenue E.C.

6 lbs. Carriage Free.

HOME MANUFACTURE.

TOMLINSON & COMPY'S

— NEW OIL —

BUTTER COLOUR

IN BOTTLE OR BULK.

Cheaper and Purer than Foreign Brands.

Our Colouring having been so generally approved of by Chemists who have given it a trial, and having given every satisfaction to Butter Makers, we have been compelled to put down a **NEW PLANT** for the manufacture of same, and are now in a position to supply **ANY QUANTITY AT THE SHORTEST NOTICE.**

DOES NOT COLOUR THE BUTTER MILK. WILL NOT TURN RANCID.

IN BOTTLES, **6d.**, **1/**, **2/6**, and **4/6**, with our own or Chemist's name on.

IN CASKS, from 1 to 40 Gallons, at lowest price.

FULL PARTICULARS, PRICES, AND SAMPLES ON APPLICATION.

SOLE MANUFACTURERS—

TOMLINSON & HAYWARD,

AGRICULTURAL CHEMISTS,

Estab. 45 Years.] **LINCOLN.** [Estab. 45 Years.]

PROPRIETORS OF TOMLINSON & CO.'S BUTTER POWDER.

Telephone Number, 1852.

Telegraphic Address—CHEMICUS LONDON.

ADVERTISERS' AND BUYERS' REFERENCE LIST AND INDEX TO ADVERTISEMENTS.

ADVERTISEMENTS APPEARING IN THIS ISSUE OF "THE CHEMIST AND DRUGGIST."

NOTE.—The Folios shown in this Index are those at the FOOT of the Page, and NOT at the Top. This arrangement is necessary in order to meet the requirements of the Post Office.

Foot of page	Foot of page	Foot of page
JAMES, B. Extract of Herbs 30	EVANS, LESCHER & WEBB (London)..... 7	MAY & BAKER Phenacetine COVER
RE & CALDER GLASS BOTTLE CO. Bottles 41	EVANS, SONS & MASON, LIM. (Montreal)..... 7	MAY, ROBERTS & CO. Dr. Hooper's Pills 37
LEN & HANBURY'S Effervescent Saline .COVER	EXCHANGE COLUMN 12	MERCS, L. (Andalaj) 37
OLLINARIS CO. Apollinaris Water 30. OUTSIDE COVER	FAYARGER & CO. Syphons 39	MIKADO MENTHOL CO. Menthol Cones 42
MBRECHT, NELSON & CO. Coca Wine 48	FENNINGS, ALFRED. Children's Powders 13	MILLS, R. M., & CO. Aftated Waters 30
ASSISTANTS WANTED Coloured Supplement	FINK, F., & CO. Gums 45	MUMFORD, G. S. Pure Crushed Linseed. TEXT 620
KINSON, B. F. Trusses 39	FLETCHER, FLETCHER & STEVENS. Concentrated Liquors. TEXT 620	NEWBALL & MASON Extract of Herbs 33
KINSON, J., & CO. Perfumery 8	FORD, SHAPLAND & CO. Coloured Counter Bills 9	NICHOL, A. Election Address 7
KINSON, J. & E. Perfumery -Caution 46	FRIEDLANDER, A. Electric Portable Lamp 19	NICKELS, B., & CO. Funerals 15
STIN & CO. Cautions 46	GIBSON, R. Medicated Lozenges 10	OAKLEY & SONS Wellington Knife Polish 46
STRALIAN MEAT CO. Extract of Meat, "Ranormie" 19	GLOY MANUFACTURING CO. 45	ORME & CO. Scientific Apparatus 10
	GOODALL, BACKHOUSE & CO. Household Specialties 15	ORRIDGE & CO. Transfer Agents Coloured Suppt.
	GREAT TOWER STREET TEA CO. Tower Tea-Injunction 16	PERKEN, SON & RAYMENT
	GRIMWADE, RIDLEY & CO. Oil of Eucalyptus 40	Cameras and Lenses, Magic Lanterns 9
RECLAY & SONS (LIM.) Pro pectus 4, 5	GRINDLEY & CO. Petroleum Jelly 43	PETERSON, M., & CO. Sponges 41
RNETT & FOSTER	HARDY PATENT PICK CO. (LIM.), THE	PHILLIPS, G., & CO. Pure Spirits of Wine 46
Aerated Water Machinery .OUTSIDE COVER	HARKER, STAGG & MORGAN. Essential Oils 37	POCOCK, KEEVIL & CO. Patent Thermo Feeding Bottle 35
TES, F. W. Sulphur Salt and Friczettes 43	HARRIS, P., & CO. Pure Oxide of Zinc 37	POTHS, IL., & CO. Bottles 27
EDLER, J., & CO. Blood Mixture 37	HARSTON & CO. Ginger Ale 48	POTTER & CLARKE Extract of Herbs 32
BRINGHAM VINEGAR BREWERY CO. 18	HAY, W. Hop Ale Essence 29	PRICE'S PATENT CANDLE CO. Glycerine 43
HOP, A., & SONS	HAYNES & CO. Absorbent Woods 45	PRITCHARD, A. O. Patents and Trade Marks 10
Grandular Effervescent Preparations 27	HAYWARD TYLER & CO. Soda-water Machinery 34	RAIT, G. L., F.C.S. Analytical Chemist 48
TYON, T. BAGE, & CO. Medicated Lozenges 33	HESELTINE, WM., & SON. Premier Tea 19	RICHMOND, E. M. Indiarubbery Type 48
ATBY & HINCHLIFE	HICKISON, J. Marking Ink 27	RIGHTERS, DR. Pain Expeller. TEXT 620
Soda-water Machinery 34	HOP BITTERS CO., THE 11	ROBBINS, J., & CO. Drugs 29
EFFITS, E., & CO. Bottles 41	HOLN & SON. Patents and Trade Marks Agent 48	ROBERTS & CO. Enamelles 43
BROUGHS, WELLCOME & CO.	HUNYADI JANOS Waters 30	ROBERTSON, J., & CO. Pill Conting Machine 46
Colgate's Cashmere Bouquet Soap and Perfume 24	IDRIS & CO. Aerated & Mineral Waters & Lime Juice 31	ROBINSON, B. Corn and Wart Peel 46
The Perfumery 26	IRVIN & SELLERS. Bores 30	SANITAS, THE, CO. LIM. TEXT 620
SH. W. J., & CO. "Ol. Santali Bush" 23	ISAACS, I., & CO. Dispensing Bottles 35	SCHOOL OF PHARMACY 6
SINESSES FOR DISPOSAL	JAMES, W. H. Horse Blister 44	SELF-OPENING TIN-BOX CO. Boxes 14
Coloured Supplement	JEWSBURY & BROWN Sparkling Table Waters 32	SHERWIN, G. E. Machinery 14
	JOHNSON, H. An Epitome of Law and Practice 10	SHIPKOFF & CO. Otto of Roses 43
DBURY'S BROS. Cocoa Essence. COVER	KEARLEY & TONGE Mite Tea 17	SILICATED CARBON FILTER CO. Filters 35, TEXT 620
PER, W. B. Crinoids 45	KEATING, T. Insect Destroying Powder 50	SMITH STEPHEN & CO. S.F.R. Spirits of Wine 46
BLE MENTHOL CO. Menthol Cones 43	KIMPTON, R. A Practical Manual of Venereal and Generative Diseases 6	SMITH, T. & H., & CO. Salts of Morphia 36
VE, JOHNSON & CO.	LALOR, DR. Phosphodyne 38	SMITH, T. J. Cod-liver Oil 39
Spring Blossom Ceylon Tea 19	LIEBIG & CO. Extract of Meat 23	SPRATTS PATENT, LIM. Dog Medicines 45
EMISTS AERATED & MINERAL WATER	LINCOLN AND MIDLAND COUNTIES DRUG	STERN, G. & G. Pamidine 36
ASSOCIATION 33	CO. Clarke's Blood Purifier 36	STEVENSON & HOWELL Soluble Essences, &c. 3
ESBROUGH MANUFACTURING CO. Vaseline 26	LIVERPOOL LINT CO. Lint 48	STETON, OSCAR, & CO. O.S.' Tooth Block 42
RISTIAN, J. Marking Ink 45	LIVERPOOL SCHOOL OF PHARMACY 6	SWANN, H. H. Dr. Churchill's Syrup of Hypophosph. 40
URCHILL, J. & A. Books 7	LOISEITE, PROFESSOR 6	TODD, A. M. "Crystal White" Oil of Peppermint 40
ARKS, S. The Nursery Food Warmer 47	LONGMANS, GREEN & CO. 6	TOMLINSON & HAYWARD
AGATE & CO.	Watts' Dictionary of Chemistry 6	Sheep Dips and Butter Color 20
Cashmere Bouquet Soap and Perfume 24	The Fundamental Principles of Chemistry Practically Taught 6	TOWNSEND, J. Handbills, Printing, &c. 9
THURST & HARDING Oils, Paints, &c. 46	LONDON HOMOEOPATHIC HOSPITAL AND	TREATY, B. C. Perfumeries 43
ISAN, J. R. Engraved Window Tablets 44	MEDICAL SCHOOL 6	TYRER, P. Borough Ketchup 15
TOCHLEY, T. Starch Glaze 44	LYNCH & CO. L. Brand Dispensing Bottles COVER	UNIVERSAL SIMPLEX TYPE WRITER 9
UCH, F. B. Damiana Waters 40	MACK, H. Pasta Mact 43	VACCINE ASSOCIATION Pure Vaccine Lymph 40
HUS DYSPPEPSIA CAKES 33	MCKESSON & ROBBINS Pills 11	WARREN, A., & J. Stodhart's Sea Salt 44
Y & SONS Horse and Cattle Medicines 45	MACNAIR, J., & CO. Gums, Nutmeg, &c. 45	WERNER & PELEIDERER Machinery 39
Y. SON & HEWITT	MANCHESTER SCHOOL OF CHEMISTRY	WEST, P. Perfumery 42
Horse and Cattle Medicine Chests 44	AND PHARMACY 6	WILKINSON & CO. Compressed Hops 10
NEFORD & CO. Fluid Magnesia 39	MAW, SON & THOMPSON Price Current 8	WILKS & WOOTTON (WESTMINSTER COLLEGE) 6
ILTON & CO. Toilet Futures 39	Feeding Bottles 49	WILSON, W. Toothache Pellets 44
NING, J. S. Toilet Futures 39	Syringes for the Injection of Glycerine 39	WOOD, VINCENT Chest Protectors, &c. 38
NLOP, MITCHELL & CO. Glasses, &c. 35		WOODHALL SPA Mineral Water. TEXT 620
RRANT & CO. Perfumes 45		WYLEYS & CO. Pharmaceutical Preparations, Wholesale Druggists 37
IMAN, SONS & CO. Embrocation Text 670		YEATMAN, F. J. Syr. of Hypophosph. 35
IS & SONS Aerated Waters 10		
ANS, SONS & CO. Hawley Adjuncts and Materia Medica 7		

CLASSIFIED LIST OF ALL ADVERTISERS

Those Announcements appear in "THE CHEMIST AND DRUGGIST." Those whose Names do not appear above are published in one of the other issues of this month.

AGRIC ADIC Ann and Co. Bris and Callard (Saita)	DITTO PLANT [See SYPHONS and ESEENONS.] Barnett and Foster Brady and Hinchliffe Bnah, W. J., and Co. (Foam Producer, &c.) Favarger, H. Gneret Freres Tyler, Hayward, and Co.	ANALYSIS Rait, G. L. F. C. S. APPARATUS Bracher & Co. (Automatic distilling) Brinjes and Goodwin Clarke, S. (Food Warmer) Friedlander, A. May, Roberts (Water-bath) Nickels, B., & Co. Orma, scientific Perken, Son and Rayment Rogers, P. & Co. Rothermel, Paul (Vinegar)	BEESEX & HONEY BOTTLES Bowlder and Co. BISMUTH, PREP. Burroughs, Wellcome and Co. Heaton, Squire and Francis Hewlett and Sons Howards and Sons May and Baker Symes and Co.	BLOOD MIXTURE Beedler, J., and Co. Lincoln and Midland Counties Drug Co.	BOOKS Bailey, J. Bell, G., and Sons Churchill, J., and A. Dobell, Dr. James, Dr. Prosser Johnson, J., and J. H. Keene and Ashwell Kimpton, R. Lewin, H. K. Loisette, Professor Longmans, Green and Co. Renshaw, H. Robinson, G. H. Stevenson and Howell (Aerated Waters, Cordials, &c.) Wells, G. Wright, J., and Co.	BRUSHES Barrett, R. H. Barnett and Foster Brady and Hinchliffe Brethit's (Lim.) Brooks, Peel (Perfumers) Dunlop, Mitchell and Co. (Tubes) Hearn, E. A., and Co. Issacs and Co. Kilner Bros. Lang, J., and Co. Maw, Son and Thompson Pothe Toozood "W" Brand	BUTTER COLR, &c. Bush, W., and Son (Mafingoldine) Johnson and Jysgrensen Oldfield, Pattison and Co. Tomlinson and Hayward	CAMPHOR Howards and Sons Keene and Ashwell (Homoeo-May and Baker (pathic)) Maw, Son and Thompson
RATED AND MINERALS Jams, B. ollinaris (Hunyadi, Friedrichhall, and Apollinaris) rest and Foster emist Aerated Waters Association rrant, Geo., & Co. ie (Ruthin) ua, Son and Co. urston and Co. y, W. ual and Co. (Citric Acid) (horho) nyadi Janos ris and Co. ram and Royle ebury and Brown hannis Mineral Water Co. lis and Co. lis and Co. (Bourne) ons Spring Natural Mineral Water Co. lor, T. and F. J. odhall Spa See GINGER ALB.]	AGENCIES ABROAD Appley and Halse Australian Drug Co. Campbell, N. S., and Co. Cocking (Japan) Evans, Sons and Mason (Lim.) (Canada) Fulton (Melbourne) Fougers (New York) Kempthorne (New Zealand) Macnaughton, F. J. Peake, Allen and Co. Prosser, E., and Co. (Sydney) Roberts (Paris, &c.) Rocke (Melbourne) Sharland & Co. (Auckland N.Z.) Soul, W. H., and Co.	BANDAGES Bailey, W. H., and Son Hole Hall Mill Co. Robinson and Sons BATH GLOVES Maw, Son and Thompson Boxer Bros. BOXES Austin and Co. (Cardboard) Irwin and Sellers Metz, Paul (Willow) Nokes, B., & Co. Self-Opening Tin Box Co. BICARB. SODA Gaskell, Deacon and Co. Howards & Son May and Baker	BEESWAX & HONEY BOTTLES Bowlder and Co. BISMUTH, PREP. Burroughs, Wellcome and Co. Heaton, Squire and Francis Hewlett and Sons Howards and Sons May and Baker Symes and Co.	BLOOD MIXTURE Beedler, J., and Co. Lincoln and Midland Counties Drug Co.	BOOKS Bailey, J. Bell, G., and Sons Churchill, J., and A. Dobell, Dr. James, Dr. Prosser Johnson, J., and J. H. Keene and Ashwell Kimpton, R. Lewin, H. K. Loisette, Professor Longmans, Green and Co. Renshaw, H. Robinson, G. H. Stevenson and Howell (Aerated Waters, Cordials, &c.) Wells, G. Wright, J., and Co.	BRUSHES Barrett, R. H. Barnett and Foster Brady and Hinchliffe Brethit's (Lim.) Brooks, Peel (Perfumers) Dunlop, Mitchell and Co. (Tubes) Hearn, E. A., and Co. Issacs and Co. Kilner Bros. Lang, J., and Co. Maw, Son and Thompson Pothe Toozood "W" Brand	BUTTER COLR, &c. Bush, W., and Son (Mafingoldine) Johnson and Jysgrensen Oldfield, Pattison and Co. Tomlinson and Hayward	CAMPHOR Howards and Sons Keene and Ashwell (Homoeo-May and Baker (pathic)) Maw, Son and Thompson

CAPSULES

Denoual, J. (Medicinal)
Duncan, Flockhart and Co.
(Cascara Sagrada)
Durant, F., and Co.
Evans, Sons and Co.
Hooper, B., and Co.
Maw, Son and Thompson

CAPSULES (METALLIC)

Betts and Co.
Melin, G. (Machine)

CARMINE

Bush, W. J., and Co.
Sellers

CATALOGUE

Evans, Sons and Co. (Price Current)
Maw, S., Son and Thompson
(Price Current)
Sanzer and Son
Thompson, Millard and Co.

CHEMICALS

Bennett and Jenner
Bush, W. Son and Co.
Dunn and Co.
Elwart, A.
Fletcher, Fletcher & Stevenson
Gaskell, Deacon and Co. (Bicarbonate of Soda)
Hill, A. S., and Son
Howards and Sons (Pharmaceutical)
Kuhn, B.
Levermore, Aug., and Co.
May and Baker
Middleton, Kirkpatrick and Hart
Morris, Callard, and Co.
Oscar Andree and Co.
Stern, G. and G. (Pumiline)
Sumner, R., and Co.
Smith, T. H., and Co.
Tyke and King
White, A., and Sons
Zimmermann, A. and M.

CHALK PRECIP.

Dunn and Co.
Levermore, Aug., and Co.
White, A., and Sons

CHEST PROTECTORS

Maw, Son and Thompson
Wood, V.

CHL. OF POTASH

(Compressed Tablets)
Burroughs, Wellcome and Co.
Hooper, B., and Co.

CHLOR. OF GOLD

Oscar Andree and Co.
Rowland, L.

CHLORIDE OF LIME

Government Sanitary Co.
National Chemical Co.
New Carbolic Sanitary Co., Ltd.

CHLORODYNE

Blyton-Bage and Co. (Twemlow's)
Burroughs, Wellcome and Co.
Davenport (Brown's)
Freeman, R.
Thomas, Wakeham and Co.
(Dr. Henry's)
Towle, A. F.

CHLOROFORM, &c.

Duncan, Flockhart
Macfarlan, J. F.
Smith, T. H.
Zimmermann

CIGARETTES

Evans, Sons and Co.
French Hygienic Co. (Coca)

CITRIC ACID

Hassall's (Phospho)
Nascio, Aveline and Co.

COCAINE HYDRO.

Howards and Sons

COCA WINE

Armbricht, Nelson and Co.
Evans, Sons and Co.
French Hygienic Co. (Cigarettes and Tobacco)

COCOA & CHOCOLATE

Cadbury
Fry (Malted)
Van Houten's Cocoa

COD-LIVER OIL

Allen and Hanbury
Burkoyne (Petroleum)
Burroughs, Wellcome
Evans, Sons and Co.
Hill, A. S., and Son
Lorimer and Co.
Smith, T. J.
Woolley, Sons and Co.
Wright, Layman and Umney

COFFEE

Lynton and Co. (Coffee Essence)

CILPISABLE TUBES

Betts and Co.
Brooks, H., Peel and Co.

COMP. ESSENCE

Fitter and Clarke

COMPRESSED MEDICINES

Allen and Hanbury's
Burroughs, Wellcome and Co.
Hooper, B., and Co.

CORN CURES

Maw, Son and Thompson
Robinson, B.

CONFECTIONERY

Baze, Blyton and Co.
Gibson, R., and Sons
Kerfoot, T.
Warrick Brothers

CONCENT. LIQS.

Evans, Sons and Co.
Fletcher, Fletcher & Stevenson
Keith, B., and Co.
Thompson, H. A., and Son

COTTON WOOL

Haynes G., & Co. (Absorbent)
Maw, Son and Thompson
Robinson and Sons (Absorbent)
Sanger, J., and Sons
Seabury and Johnson

DENTIFRICES

Jewsbury and Brown
Newbery and Sons
Roberts & Co. (Enamellos)
Sutton, O., and Co.
Thompson and Capper
Woods, W. (Aerea Nut)

DISINFECTANTS

Government Sanitary Co.
National Chemical Co.
New Carbolic Sanitary Co., Ltd.
Sanitas Co.

DISINTEGRATORS

Carter, J. H.
Hardy Patent Pick Co., Ltd.

DOG MEDICINES

Spratts (Patent)

DRUGGISTS' SUN.

Ayrton and Sanders
Barclay and Sons, Ltd.
Evans, Lecher and Webb
(Hayley's Counter Adjuncts)
Evans, Sons (Savars)
Hill, A. S., and Son
Iris and Co.
Lynch and Co.
May, Roberts and Co.
Newbery, F., and Sons
Sanger and Sons
Schantz and Co
Soul, W. H., and Co.
Thompson, Millard and Co.
Toogood, W.
Wood, Vincent

DRUMS, CANS, &c.

Noakes and Co.

DYES

Ayrton and Sanders
Prunk, Davis and Co.

EAU DE COLOGNE

Farina, J. M.

EFFERVESCENT

Allen and Hanbury's (Saline)
Bishop, A., and Sons
Curtis and Co.
Evans, Sons and Co.

ELECTRIC APPAR.

Colthurst & Harding (Electric Light Oil)
Darton, F., and Co.
Friedlander, A.
Orme and Co.

EMBROCATION

Clark, W.
Ell man, Sons and Co.

ENEMAS

De P., & Co.
Ingram and Son

Lynch and Co.
Maw, Son and Thompson
Sanger and Son
Schutze, F., and Co.

ENGRAVERS

Barker, W., and Son

ESSENCES, FRUIT

AND SOLUBLE

Brathby and Hinchliffe
Burkoyne, Burbridge and Co.

Bush, W. J., and Co.
Bush, W., Son and Co.
Hay, W.

Iris and Co.
Lorimer and Co.

May and Baker
Oldfield, Pattison and Co.

Stevenson and Howell
Tyke and King

Tyrer, P. (Anchovies)
Vogt, G.

Woolley, Sons and Co.

ESSENTIAL OILS

Bush, W., Son and Co.
Bush, W. J. (Lemons, &c.)
Locking (Japan Peppermint)

Evans, Sons and Co.
Jackson, J., and Co.
May and Baker

Nascio, Aveline and Co.
Rocke, Tompitt (Eucalyptus)

Stallman and Fulton
Stevenson and Howell

Symes and Co.
Todd, A. M.

Vogt, G.
Warrick Brothers

Wright, Layman and Umney

ETHER

Duncan, Flockhart and Co.
(Chloric)

Howards and Son
May and Baker

Robbins
White, A., and Sons

EXTRACT, MEAT

Australian Meat Co.

Brand and Co.
Coleman and Co.

Liebig Co.
Viking Food and Essence

EUCALINUM

Rocke, Tompitt and Co. (Antiseptic Poultice and Vinegar)

EUCALYPTUS OIL

Fletcher, Fletcher & Stevenson
Grinwade, Ridley and Co.

EXTRACTS, FLUID

Allen and Hanbury's
Barber, G., and Co.
Burkoyne, Burbridge
Evans, Sons and Co.
Fletcher, Fletcher & Stevenson
Heaton, Squire and Francis
Oldfield, Pattison and Co.

FEEDING BOTTS.

Kilner Bros.
Maw, Son and Thompson
May Roberts and Co.
Pocock, Keevil and Co.
Thompson, Millard
Toogood, W.

FILTERING

Doulton and Co.
Mawson Swan, and Weddell
Nickels, B., and Co.
Black & Brownlow
Silicated Crbn Filtr Co.

FLY PAPERS

Ford, Shapland and Co.

FOAM PRODUCERS

Bush, W. J., and Co.

FOOD WARMERS

Clarke, S.

FOOD (Infants & Invalids)

Allen and Hanbury's
Benger's Pancreatised
Brand and Co.
Burroughs, Wellcome (Peptonizing)
Dahl's Biscuits Cakes
Goodall, Backhouse and Co.
Heaton, Squire (Malted)
International Patents Association
(Dr. Mell's Health Biscuits)
Lazenby, E., and Son
Liebig Co.
Mottershead and Co. (Benger's Food)
Nestle, H.
Ridge's, Dr., Food
Spring and Co. (Kef.)
Van Abbott (Diabetic)

FORMULAE

Brooks, T.

GINGER ALE

Adams, B.
Harston and Co.
Hay, W. (Essence)

GLYCERINE

Fink
Martindale, W. (Nitro-Glycerine Tablets)

Maw, Son and Thompson
Price's Candie Co.

GRANULAR PREP.

Bishop, A., and Sons
Burroughs, Wellcome and Co.

Bush, W., and Co.
Curtis and Co.

Evans, Sons and Co.
Heaton, Squire and Francis

Hill, A. S., and Son
Wright, Layman and Umney

GUMS

Fink (Arabic, &c.)
Prunk, Davis and Co.

GUTTAPERCHA

Duncan, Flockhart

HAIR PREP.

Bates, F. W. (Frizzetta)
Brodie, J. (Imperial Hair Dye)

Capper, W. B. (Crimdons)
Cheesebrough Mfg. Co.

French Hygienic Co.

HERB BEER EXTS.

Adams, B.
Newball and Mason

Potter and Clarke

HERBALISTS

Adams, B.
Newball & Mason (Ext. of Herbs)

Porter and Clarke
Wilkinson, A., and Sons (Compressed Hops)

HOMOPATHY

Eppe and Co.
Keene and Ashwell

Leath and Ross
Thomson and Capper

HOPS

Wilkinson, A., and Sons (Compressed)

HOP ALE ESSENCE

Hay, W.

HOSPITALS

London Homoeopathic

HYPOPHOSPHITES

Duncan, Flockhart and Co.

Dunn and Co.
Fellows

Fletcher, Fletcher & Stevenson
Symes & Co.

Swann, H. H. (Dr. Churchill's)
Tyke and King

Yeatman, F. J.

INK (See MARKING.)

Bewley and Draper
Duncan, Flockhart

INHALERS

Maw, Son and Thompson
Toogood, W.

INSECTICIDES

Evans, Sons and Co.
Keating, T.
Sanford

Steiner and Co.

KETCHUP

Tyrer, P.

LARD

Ewen, J.

LAMPS, LIGHTS, &c.

Clarke, Samuel ("Fairy")
Friedlander, A.

LEECHES

Fitch and Nottingham
Potter and Clarke

LIME JUICE

Iris and Co.
Kernick and Son

LINSEED

Iris and Co.
Mumford, G. S.

LINT

Liverpool Lint Co.
Maw, Son and Thompson

Newsome (Surgons')
Robinson and Sons
Seabury and Johnson

LOZENGES

Allen and Hanbury's
Blyton, Baze & Co. (Medicated)

Evans, Sons and Co.
Gioson, R., and Sons (Manfrs.)
Hill and Son

Houde, A. (Hydrochlorate of Cocaine)
Kerfoot, T.

Lorimer and Co.
Martindale, W. (Nitro-Glycerine Tablets)

Warwick Brothers (Heliotrope Pastilles)

LOOPERS

Elste, A., and Co.
May, Roberts and Co.

Sanzer and Sons (Bath Gloves, Belts, and Socks)

MACHINERY

Birmingham Machinists' Co.
(Printing)

Brinley and Goodwin
Carter, J. H.

Dale, J., and Son
Hardy Patent Pick Co., Ltd.

Melin, C. (Cansuine)
B. Nickels and Co. (Funnels)

Sherwin
Werner and Pfeiderer

MAGNESIA

Bishop, A., and Sons
Bush, Son and Co.

Curtis and Co.
Dinneford

Henry, T. and W. (Calcine)
Lorimer and Co. (Citrate)

Oscar Andree and Co.

MALT EXT., ETC

Allen and Hanbury's

Burroughs, Wellcome and Co.
(Malt Extract "Kenler")

Heaton, Squire and Francis
Lorimer and Co.

Paterson's Chemical Manufacturing Co.

MENTHOL

A 1 Menthol Depot, A. W.
Shirley, Proprietor

Banner, E. R.
Castle Menthol Co.

Cooking and Co.
Hockin Wilson and Co.

Maw, Son and Thompson
Mikado Menthol Co.

Shirley, A. W.
Todd, A. M. (Crystalline Oil of Peppermint)

MARKING INKS

Barber, G., and Co. (Crimson)

Christian, J.
Hickison, J.

MEDICINE CHESTS

Burroughs, Wellcome and Co.

Day, Son and Hewitt (Veterin.)
Day and Sons

MERCURIALS

Bush, W., and Co.
Howards and Sons

May and Baker

METHYLATED**SPIRITS**

Burroughs, J.

Harvey, J. & W., and Co.
Jones and Co.

Macnair, J. & D., and Co.
Phillips, G., and Co.

METHYLENE

Robbins, J., and Co.

MICROSCOPES

Darton, F., and Co.

Perken, Son and Raymont

MIXING MCHRY

Brocher and Co.

Brinley and Goodwin
Burroughs, Wellcome and Co.

Carter, J. H.
Sherwin, G. E.

Werner and Pfeiderer

MORPHIA

Macfarlan, J. F., and Co.

Smith, T. and H.

MUSTARD

Banner, E. R. (Oil)

Johnson, J. H. and S. (Ess. Oil)

</

- PHOTOGRAPHIC**
Wright and Grey
wards and Son (Chemicals)
ken, Son and Rayment
rion and Co.
v and Baker
ar Andrese and Co.
- PASTES**
rongs, Wellcome and Co.
ther, W.
w, Son and Thompson
Dalmas, A. D.
bury and Johnson
th, W. F.
- PILLS (Coated, &c.)**
on and Hanbury (Schief-
line) (Pearl Coated)
ron, Harveys and Co.
ham, Thomas
ins, Sons and Co.
ron, Squire and Francis
n, A. S. and Sons
per, Dr.
oot, T. (Suga Coated)
rmer and Co.
erson and Robbins Ovold-
pulated
rison and Co.
berg and Sons
ger, J. and Sons
th, W. F.
hall, Bros. and Barclay
on, H. H.
mer, W. R. (Coated)
leys and Co.
- PL MACHINES**
r, Son and Thompson
erson, J., and Co. (Coating)
ood, W. (Coater)
- PROPHYLLIN, &c**
th, B. and Co.
th, T. and H.
- PICELAIN GDS.**
s, H. and Co.
ood (E.c. Pots, regist.)
- POLISHING**
mpartner (La Brillantine)
ley, Bourdas (Albatum)
ck, W.
ay, John, and Sons
- PINTING**
ingham Chemists' Co.
ers Bros.
mille Apparatus Co.
H. Shapland and Co.
erlock, H.
neud, J. (Exeter)
- POLYLINE**
rongs, Wellcome and Co.
n, G. and G.
- QUINE SALTS**
wards and Son
ur Andrese and Co.
ermann
- RENNET**
Benzer's (Essence of)
Johnsen and Jorgensen
- SACCHARIN**
Allen and Hanburs
Burroughs, Wellcome and Co.
- SALICINE**
Macfarlan and Co.
Smith, T. and H., and Co.
- SALOL**
Kuhn, B.
- SAUCES, PICKLES**
Birmingham Vinegar Brewery
Co.
Goodall, Backhouse and Co.
Lazenby (Harvey's)
Tyrer, P.
- SEA SALT**
The Maldon Crystal Salt Co.
Warren, A. and J. (Stoddart's
Sea Salt)
- SCHOOLS OF
PHARMACY,
HOSPITALS, &c.**
Edinburgh Classes
Liverpool School
London Homoeopathic and
Medical School
Manchester College
South London School of
Pharmacy, Lim.
The School of Pharmacy
Tully, J.
Westminster College
- SEALING WAX**
Fisher, Clark and Co.
Stewart, G., and Co.
- SELTZOGENES**
Durafor, M.
Idris and Co.
May, Roberts and Co.
- SHAVING**
Dukas and Co. (Brushes)
- SOAP (SOFT, &c.)**
Recknell, Turner and Sons
Chiswick Soap Co.
De Pass and Co.
Maw, S., Son and Thompson
Pears' Soap
Stearn, G. and G. (Pumiline
Toilet and Sanitary)
- SHEEP DIP**
Bigg, T.
Cooper, W., and Nephews
Grindiev and Co.
Tomlinson and Hayward
- SMELLING SALTS**
Shirley, A. W.
- SHOP FITTERS**
Bowling and Govier
Bygrave, J. and W.
Corran, J. R.
Natali, E. (Show Cases)
Yates, W. S.
- SPECTACLES**
Botwright and Grey
Darton, F., and Co.
Raphael and Co
- SPIRIT**
Boord and Son
Bnrrough (Pure & Methyl.)
Harvey, J. W., and Co.
Jones and Mason (Methyl.)
Macfarlan, J. and D.
Phillips and Co.
Smith, Stephen and Co.
- SPONGE**
Gresswell Bros.
Cresswell, R., and Co. (Lim.)
Evans, Sons and Co.
Hutchinson, A., and Co. (Bags)
Maw, Son & Thompson (Bags)
Peterson, M.
- STAMPS (RUBBER)**
Pollard, A. W.
Richford, E. M.
Van Houten and Co.
- STOPPERS**
Austin and Co. (Sprinklers)
Barnett & Foster (The Eclipse)
Brooks, Peel (Sprinklers)
- SURGICAL**
Ayrtton and Saunders
Bailey, W. H., and Son
Christy, T., & Co.
De Pass and Co.
Haywood, J. H.
Hutchinson, A., and Co.
Ingram and Son
Liverpool Patent Lint Co.
Maw, Son and Thompson
Newsome, C.
Robinson and Sons
Thompson, Millard and Co.
Woolley, Sons and Co.
Wood, Vincent
- STARCH**
Critchley (Gloss)
- STROPHANTHUS**
Burroughs, Wellcome and Co.
- SUGAR**
Gibson, R., and Sons
- SYMPHONS**
Barnett and Foster
Durafor, M.
Idris and Co.
Kilner Bros.
- SYRINGES**
De Pass and Co.
Maw, Son & Thompson, S.
Sumner, R. and Co.
- SYRUPS**
Fletcher, Fletcher (Liquors)
Idris and Co.
Swann, H. H.
- TARTARIC ACID**
Middleton, Kirkpatrick and
Barr
- TEA**
Cave, Johnson and Co.
Gt. Tower St. Tea Co.
Heseldine, Wm., and Son
Kearley and Tonge
Walker and Dalrymple
- TEREBENE**
Hearon, Squire and Co.
- THERMOMETERS**
Darton, F., and Co.
Maw, Son and Thompson
Perken, Son and Rayment
Raphael and Co.
- TIN CANISTERS**
Noakes, B., and Co.
- TOILET FIXTURES**
Downing, J. S.
- TOOTH PASTE**
Jewsbury and Brown
Maw, Son and Thompson
Sutton, O., and Co. (Black)
Woods, M. (Arca)
- TRADE MARKS**
Horn and Son
- TRUSSES**
Bailey, W. H., and Son
Evans, Sons and Co.
Haywood, J. H.
Lynch and Co.
Maw, Son and Thompson
- TYPE-WRITING**
Facsimile Apparatus Co.
Pollard, A. W.
The Universal "Simplex"
Type-Writer
- URETHANE**
Howards, Sons and Co.
- VALUERS AND
TRNSFR. AGNTS**
Baker, P. C.
Orridge and Co
Tomlinson and Sons
- VARNISH**
Clark, W.
Colthurst and Harding
- VACCINE LYMPH**
Association for the Supply
of the Pure
- VERMIN KILLERS**
Battie, J. R.
Sanford and Son
Steiner and Co.
- VETERINARY**
Bigg, T.
Clark, W.
Corner, R. (Devonshire Oils
Day and Sons
Day, Son and Hewitt
Gregory, W. (Devonshire Oils)
James, R. J. (Bilster)
Scratta (Dogs)
Tomlinson and Hayward
- VINEGAR**
Birmingham Vinegar Brewery
Co.
Rothermel (Making)
- WAFERS**
Crouch, F. B. (Damiana)
- WHELES & EXPT
DRUGGISTS**
Allen and Hanbury
Barron, Squire and Co.
Burgess, Wilkows
Burgeyne, Burdidge
Bush, W., Son and Co.
Evans, Lecher and Webb
Evans, Sons and Co.
Evans, Sons and Masor (Lim.)
Ferris and Co.
Harker, Stag and Morgan
Hearon, Squire and Francis
Hewlett and Ro
Lorimer and Co.
Hill, A. S., and Son
Oldfield, Pattison and Co.
Potter & Clarke (American, &c.)
Southall Bros. and Barcia
Sumner, R., and Co.
Synes and Co.
Thompson, Millard and Co.
Thompson, H. A., and Son
Woolley, Jas., Sons and Co.
Wright, Layman and Umtey
Wyleys and Co.
- WINDOW TABLTS**
Corsan, J. R. (Engraved)
- WINES AND SPTS**
Boord and Son
Coleman and Co.
Durrant, G. (Orange)
Goodall, Backhouse and Co.
Idris & Co. (Quinine Whe)
Ingram and Royle
Liebig's Wine Co.
Phillips, G., and Co. (Pure
Spirits of Wine)
Smith, Stephen, & Co. (S.V.R.)
Robinson, B. (Orange)
- WOOD WOOL**
Sanitary Wood Wool Co.

USE

LIEBIG COMPANY'S EXTRACT OF MEAT.

*** Ask for the COMPANY'S Extract, and see
that it bears Justus von Liebig's SIGNATURE
IN BLUE INK across the Label.

**HIGHEST AWARD AT AMERICAN EXHIBITION, LONDON.
SILVER MEDAL (1st Prize), NEWCASTLE EXHIBITION
BESIDES MANY AWARDS AT PREVIOUS EXHIBITIONS.**

ARTICLES WHICH PAY TO INTRODUCE

Because they are of the very best quality, and are put up most attractively, special samples and circulars being supplied for distribution.



The large demand in Great Britain for Colgate's Cashmere Bouquet Soap which has arisen in very short time is the more remarkable because it has been created solely through the drug trade, without any newspaper advertisements.

The quality of the Soap, its handsome appearance and delightful perfume, make it sell on sight, while the distribution of the samples brings the customers promptly to the chemists who send them out.

See letter, "The Bright Side," in THE CHEMIST AND DRUGGIST, Nov. 5, 1887, p. 590; also No. 12, 1887, pp. 611 and 624.

Note opinion of THE CHEMIST AND DRUGGIST, Sept. 17, 1887.

A NEW SOAP.—The soap trade of chemists has greatly diminished, and has almost vanished so far as the lower qualities are concerned. The only chance for maintaining the returns from this department is to place novelties of a high-class character before customers, and we should think that there will be considerable satisfaction in introducing the Cashmere bouquet soap made by Messrs. Colgate & Co., of New York. This is a cream-coloured soap in oval tablets; it is remarkably pure and high-scented, and is put up in neat half-dozen boxes, with several elegant and artistic show-cards. The agents, Messrs. Burroughs, Wellcome & Co., inform us that a liberal supply of sample tablets (one-fourth the regular size) are presented to the retailer, so that sales may be facilitated. It is the favourite soap in the "States."

THOUGH NOT A CHEAP SOAP,

Quality considered, Colgate's Cashmere Bouquet Soap is the best value in the market. It is made from a special stock which is not employed by any other soap maker in the world.

SAMPLES—SPECIAL OFFER.

Until further notice, with each dozen of Colgate's Cashmere Bouquet Soap ordered of us, or through the wholesale houses, we will supply 1 doz. samples for free distribution if a request for same be made on order. The samples are one-fourth the size of the regular soap and are much appreciated by all who receive them.

With large orders we will supply special circulars to accompany samples bearing chemist's name and address only. Colgate's Cashmere Bouquet Soap has the largest sale of any superfine toilet soap.

Price, retail, 1s. 3d.; per dozen, 10s.; per gross, 110s. nett.

ORDER AT ONCE.

IT WILL PAY YOU TO DO SO.



COLGATE'S CASHMERE BOUQUET PERFUME

This exquisite odour, like that of the soap, is as distinctive as it is delicate and lasting. It is exceeding popular with the *élite* of society wherever it becomes known.

Prices: 1 oz., 2s. 6d. retail; 22s. doz.; 21s. 3d. in gross lots.

2 oz., 4s. retail; 30s. 9d. doz.; 29s. 7d. „ „

Also supplied in bond at special rates.

COLGATE & CO., 67 HOLBORN VIADUCT, LONDON, E.C.

THE VERDICT.

Kepler Malt Extract, made from barley, contains all the choice restorative principles of this grain, which authorities agree is unequalled for the excellence and abundance of its arbo-hydrates, diastase, &c.

In his "Chemistry," Vol. I., Inspratt says:—"Any of the cereals may be employed in the preparation of malt, but barley is referred for this purpose."

Albuminous Malts.—In manufacturing a malt extract of one part barley and three parts wheat, oats, rye, Indian corn, &c., three-quarters of the nutrient constituents of the best possible of malt extracts is sacrificed for the sake of a little extra vegetable albumin, hardly equal to a sip of beef-tea.

In Miller's "Chemistry" we read "Other grains, such as wheat, rye, and even Indian corn, may be malted, but experience has shown that barley is the grain best adapted to the process."

Carbo-hydrates.—It should be noted, that in preparing malt extract, the design is not to make *vegetable beef-tea*, but rather to extract those proximate principles, for which alone mankind depends exclusively upon the vegetable kingdom.

In its abundance of these principles, barley stands unequalled, and for this reason is the Kepler Malt Extract made from barley only.

Diastase.—"In the manufacture of malt, those grains only are used in which, during germination, diastase is developed, and among them *barley takes the first rank*" (BERSCH).

"In malted barley," writes Sir Wm. Roberts, "we have at command an unlimited supply of diastase power."

Alcoholic Malt Extract.—"In Extract of Malt," writes Lersch, "the absence of alcohol and carbonic acid is to be observed. In beer there is only about one-fifteenth extract."

"The Kepler Extract is free from alcohol, while it contains all the nutrient constituents of the malt in a soluble form" (Dr. Edmunds).

Cheap Malt Extracts.—These are the dearest of all in the end. The dose, for example, of a malt extract which costs 1s. per bottle, is double that of the Kepler, and the quantity in each bottle less than half.

The Kepler Malt Extract is the most palatable and easily digested."

—Medical Press and Circular.

Kepler Solution and Kepler Malt Extract supplied to the trade in $\frac{3}{4}$ and $1\frac{1}{2}$ lb. bottles at 22s. and 38s. per doz. Retail prices, 2s. 6d. and 4s. each. These prices subject to our usual discount. May be obtained of all Wholesale Houses throughout the World.

"VASELINE."

NOTICE !! All sizes of our Preparations of Petroleum Jelly can now be obtained **PROMPTLY** from any of the Wholesale House.

The fancy word "VASELINE" indicates our make of Petroleum Jelly. It is the Registered Trade MARK of THIS Company and cannot be applied to any other goods without infringing the rights of this Company under the Trade Mark Act.

SEND FOR NEW PRICE LIST.

CHESEBROUGH MANUFACTURING CO. CONSOLIDATED (NEW YORK),
42 HOLBORN VIADUCT, LONDON, E.C.,

Proprietors and **SOLE** Manufacturers of the "VASELINE" Preparations.

ANTIPYRIN. {"THE REMEDY FOR SUFFERERS AND OR
PAIN."—Professor Germain Séé.

PROBABLY no drug has ever in so short a time attained so favourable a position in medical opinion as Antipyrin. The results of its use as a substitute for opium and morphia in pain on the one hand, and for quinine as a febrifuge on the other, are truly remarkable.

It has been known to stop hæmorrhage better than iron or ergotine. It has cured rheumatism where other drugs have failed. It has also been successfully employed in sea-sickness, erysipelas, &c., &c.

It is supplied in Crystals, and also compressed in 5-grain Tablets, which afford a convenient, eligible, and not disagreeable form of administration.

Prices—Tablets, 5 grs. each, in bottles of 25, 20s. per doz.; in bottles of 100, 70s. per doz., subject to usual discount; retail prices, 2s. 6d. and 7s. 6d. each. Therapeutic leaflets on Antipyrin, containing medical reports for distribution to medical men, will be supplied to only one chemist in any one locality, though single copies will be sent to any chemist on request.

Price of Antipyrin in crystal, 3s. 5d. per oz., subject to usual discount. Special terms for large quantities. Supplied by all Wholesale Druggists.

WHOLESALE CONSIGNEES—

BURROUGHS, WELLCOME & CO., Snow Hill Buildings, LONDON, E.C.

J. & E. ATKINSON'S PERFUMERY.

CAUTION.

"TRADE MARK" AND NEW REGISTERED LABEL.

Messrs. J. & E. ATKINSON desire to draw particular attention to their new steel-engraved shield-shaped Label, printed in two colours, blue and yellow, which they have introduced for the better protection of their customers against fraud. This new Label is now *exclusively* employed for all articles, in conjunction with the usual "Trade Mark"—a "White Rose" on a "Golden Lyre"—printed in seven colours. Messrs. J. & E. ATKINSON continue to manufacture their articles of *one and of the very best quality only*. Any goods bearing their name, but not having affixed to them the new Label as well as the "Trade Mark," should be rejected as fraudulent imitations.

 Messrs. J. & E. ATKINSON further warn their customers that their **SOLE ADDRESS**, which appears in full on their "Trade Mark" and new Label, is **24 OLD BOND STREET, LONDON**, and that they are not in any manner related to or connected with any other firm carrying on business under the same or similar name.

J. & E. ATKINSON, Wholesale and Export Perfumery and Fancy Soap Manufacturers, **24 OLD BOND ST., LONDON.**

Price List free.]

ESTABLISHED 1799.

[Price List free

manufacture of explosives, fireworks, &c.) has been 7.5. In the seven years immediately preceding the passing of the Act the annual average of deaths occurring in the course of this manufacture was 39.5. The Act may thus be assumed to have been the means of saving some 320 lives and an unknown number of persons from injuries. No accident whatever has occurred in the manufacture of dynamite and blasting gelatine during the year—a circumstance, Colonel Lajondie remarks, which, having regard to the enormous output of the Ardeer Factory, is extremely creditable to those who are actively concerned in the management of what is probably the largest dynamite factory in the world.

Picric acid twice during the year presented its claim to be included among explosives. The first occasion was an explosion at the works of Messrs. Roberts, Dale & Co., of Brombrook, Manchester, the circumstances of which will be well remembered; and the second was an accident with a fatal result which occurred at the soap works of Henry Glover, Sons & Co. (Limited), at Bradford. Picric acid was used there to colour soap with, and some got among a barrel of refuse which was afterwards burnt, causing violent degradation, and so severely injuring the man at the furnace that he died. Picric acid was consequently added to the list of explosives to which the Act applies by order in Council; but it is exempted when wholly in solution, and so when stored or manufactured in a place exclusively appropriated to such manufacture or storage so that no substance capable of forming with it an explosive mixture can come in contact with it.

Among the accidents specially commented on in the report is the fatal one which occurred in the shop of Mr. McFarlane, of Wishaw, on July 1. Mr. McFarlane's apprentice (King) and assistant (Davidson) were engaged in the back shop bottling some methylated spirits. The spirit was in a large tin vessel, which at the time contained about five pints. After they had filled a few bottles Davidson struck a match to see how much remained in the vessel and, the match being held over the top of the vessel, an explosion instantly occurred, which blew out the bottom of the vessel and set fire to the woodwork of the shop. King was knocked down by the force of the explosion, and both he and Davidson sustained injury, the latter of so serious a nature that he ultimately died. Mr. Boverton Redwood, F.C.S., Secretary of the Petroleum Association, in reply to some inquiries in reference to this accident, states that there is "no doubt whatever that explosions have taken place with alcoholic liquids similar in all respects to those caused by petroleum spirit." He mentions an instance of the explosion of an "empty" benzoline barrel, and another of an "empty" rum cask standing in a public-house bar being blown to pieces on the introduction of a lighted match through the bung-hole, several of the bystanders being seriously injured. In another part of the report the inspectors say, "Chemists sell compound coloured fires on their premises in some cases. A case of this kind at Hull has been brought to light during the year. The coloured fires so made took part in a fatal accident during the Jubilee celebration at Goole. We continue to hope that the time is not far distant when the illegal manufacture may be entirely abandoned. This, however, can only be obtained by ceaseless vigilance on the part of the officers of the local authorities, supported by the infliction of substantial penalties when the offences are proved."

There is no doubt of the vigilance with which the manufacture of all kinds of explosives is watched at headquarters, and we again take the opportunity of cautioning chemists against undertaking business hedged about with such heavy penalties as is this.

Barclay & Sons (Limited).

The conversion into a limited company of the famous old business of Barclay & Sons, of 25 Farringdon Street, is a noteworthy event in the history of the drug trade. It is one of the many steps we are all taking towards the general adoption of co-operation among the traders in a particular line. The firm has been in existence for over a hundred years. James Barclay established himself as a patent medicine vendor on a spot nearly opposite where the present warehouse stands, somewhere about 1770. The locality was known as Fleet Lane then, but in all living memory it has been called Farringdon Street. James was succeeded by his sons James and Robert. They too had sons named James and Robert, and after these cousins became partners they associated with themselves their sons, Lindsay and Robert. Lindsay and Robert afterwards held possession by themselves. Lindsay died, and Robert for a time was the sole proprietor. Subsequently he was joined by his brother, the Mr. George Barclay who is now retiring from the firm, and with these the son of the last named, Mr. George Robert Barclay, has been associated for some years. Mr. G. R. Barclay is the managing director of the company, and with him are associated on the board of direction a younger brother, Mr. A. E. Barclay, F.C.S., Mr. Horace Davenport, of chlorodyne reputation and of skilled experience in the management of the Chemists' Aerated Waters Association, Mr. Powell, a well-known patent medicine proprietor, and Mr. Quick, who has long been connected with the firm. We believe the directors particularly hope that the shares will be subscribed for principally by their customers and by the trade generally, and from the figures given it is clear that the property offered is a valuable one.

* *

Officialising the Unofficial.

The Drug Clerks' Association of St. Louis, U.S., have just taken a step which they anticipate will have some influence on the next United States Pharmacopœia. The members have been asked to analyse the prescriptions in the shops where they are employed, so as to determine what unofficial drugs, chemicals, and preparations are frequently dispensed. A tabulated report of the work accomplished is expected to give the Revision Committee of the Pharmacopœia for 1920 an idea of what unofficial substances are of importance to the druggists and physicians of St. Louis and its vicinity. The list will include every drug, chemical, or pharmaceutical preparation, proprietary or otherwise, which is not now recognised in the United States Pharmacopœia.

* *

Another Theory Gone.

Quite recently those persevering and painstaking chemists, Drs. Grünwald and Victor Meyer, have succeeded in re-determining the vapour-density of ferric chloride with remarkable concordance between the different experiments, and conclusiveness so far as the results bear upon the molecular weight of the molecule. The earlier chemists of modern times gave FeCl_3 as the formula of the chloride, but later theories regarding the valency of the elements require their bonds to increase or decrease by pairs. Thus, nitrogen is univalent, trivalent, or quintivalent, and, as iron in the ferrous state is bivalent— FeCl_2 —in the ferric state it must be quadrivalent, $\text{Fe} \equiv \text{Cl}_4$.

viz., $\text{Fe} \equiv \text{Cl}_4$. The experiments of Grünwald and Meyer show, however, that FeCl_3 is nearer the truth in this case than FeCl_4 . The ferric chloride which they used was obtained by gently heating fine iron wire in a stream of dry chlorine gas and resubliming the product, thus obtaining the pure salt in beautiful hexagonal plates, exhibiting a fine green colour by reflection, and a purple tint by transmission, light. The first determination of the vapour-density was carried out by heating in the vapour of boiling sulphur (448°C.). This temperature is the lowest at which vapour-density estimations are possible, and volatilisation was very slow; but the vapour-density obtained was considerably lower than that required by the formula Fe_2Cl_6 . At higher temperatures, viz., 518° and 605° , and in a platinum apparatus heated in a Perrot furnace to temperatures of 750° , $1,050^\circ$, and $1,300^\circ$, the numbers obtained gradually

approached the vapour-density of FeCl_3 , with, however, some decomposition into ferrous chloride and chlorine at the higher temperatures. In an atmosphere of chlorine this decomposition was not manifest, and the results corroborated the others; so that there can be no doubt that the true formula of ferric chloride is not Fe_2Cl_6 , but FeCl_3 , and any doubt which the sceptical may have on the matter is dispelled by the fact that the chlorides of aluminium and indium, —associate elements—have already been shown to possess the molecular formulae AlCl_3 and InCl_3 . If it is now found that ferrous chloride has the formula FeCl_2 , the discovery would import a flaw into the valency theory; but then it is quite possible that the formula may be Fe_2Cl_4 , wherein iron is a triad.

* *

Material Progress of Japan. The foreign trade of Japan, which amounted to \$51,000,000 in 1877, advanced steadily during the following decade, until in 1887 it reached the amount of \$95,000,000, an increase of 86 per cent. in ten years' time. In 1877 the Japanese ports were visited by barely 200 foreign vessels, with a total tonnage of 244,000, and in 1887 by 948 vessels, the aggregate tonnage of which was 1,269,429. As regards railway construction, the total mileage increased in the year 1887 from 370 to 521 miles, of which 239 belong to the Government and 282 to a private company. Last year no fewer than eleven new private companies were formed, with an aggregate capital of \$32,000,000, and it is thought that if only the surplus funds of the Western world could be placed at the disposal of this spirit of enterprise, the prospects of Japan's commercial development would be immensely brightened, and a new and profitable field of investment would be opened to foreign capitalists. Among Japanese industries the growth of cotton manufactories is perhaps the most manifest and significant. At the end of December there were 22 spinning-mills at work, representing 76,000 spindles and a yearly output of 1,320,000 lbs. Eight large new factories, with 117,000 spindles, had been started, and were being rapidly brought into working order. Although as yet Japan cannot supply herself with the material, and is therefore obliged to import considerable quantities, everything points to her success as a manufacturing nation, for she is within easy reach of great cotton-growing regions, she possesses an unlimited supply of probably the cheapest labour in the world, and her art-artisans have no equals anywhere. Foreigners settled in Japan now live at half-a-dozen settlements on the coast, where they have their own judicial tribunals—if such a term can be applied to Consular Courts presided over, in many cases, by merchants who have no legal training. They cannot lawfully trade or own land outside of those settlements, nor can they lawfully become partners with Japanese in any commercial, industrial, or other business undertaking. Yet, as railways spread and enterprises of many kinds spring up at the chief centres of activity, foreign residents can and do devise means of evading with impunity the restrictions which are imposed by the treaties.

* *

Saffron in Olden Times. Mr. Stolziss, in a recent contribution to the *Pharmaceutische Post*, mentions that the crocus of Cyrene appears to be the plant from which all saffron now cultivated in Europe is derived. The Arabs, who were well acquainted with it, as it was also found in their own country, carried it with them from Cyrene on their march westward, and caused it to be acclimatised in several parts of Northern Africa. From that country saffron was brought to Spain by the Saracens, who greatly encouraged its cultivation, as well as that of other Oriental plants, in the Iberian peninsula. Much later, after the expulsion of the Saracens from Spain, saffron-growing spread to France, Belgium, Germany, Austria, and the northern littoral of the Mediterranean, and in some of these countries it acquired a very considerable importance. In Austria especially excellent saffron was raised, as is testified by Adamus Lonicerus, who, writing in 1573, states that the saffron grown in the neighbourhood of Vienna was preferred to all other kinds. Saffron at that time was already very largely used in medicine in the form of extract, plaster, tincture, and emulsions, and its employment for pharmaceutical purposes gradually became

more and more common, until, in the "Dispensarium Pharmaceut. Austriaco-Vienense," published at Vienna in 1770, during the reign of Maria Theresa, Arabian saffron was made an ingredient in forty different preparations. The Romans used the saffron rather as a perfume than as a medicine, and Lucretius mentions that during the time of the Republic the theatres were perfumed with saffron-water, while in the residences of wealthy Romans fountains were found perfuming the rooms with a constant stream of the same preparation. A pomme or ointment (crocomagma) was also prepared from saffron with a basis of wax, of which Petronius writes: "Omnes plantae, omniaque poma, etiam minima vexatione contorta coeunt effundere crocum."

* *

Cardamom Cultivation. The *South of India Observer*, in a recent article on the cultivation of cardamoms, estimates the yield of green fruit at 1 to 1½ lb. per tree, equal to about 60 to 75 lbs. per acre, sixty trees being the average number planted on such a space. The drying process reduces the green fruit to one-fourth or one-fifth of its original weight, and, in addition to this reduction, for the almost unavoidable loss occasioned by the depredations of rats, squirrels, and snakes, who evince a remarkable fondness for the fruit, a planter may think himself fortunate if his yield of dry cardamoms comes up to 15 lbs. per acre—an estimate which we must say we consider a very low one indeed. The cardamom plants yield their first harvest in the fourth year, the seedling singularly slow in germinating, taking never less than three, and often as many as five, months before piercing the soil. Within a year from this time the plants attain a sufficient size to be placed out into pits dug for their reception, the shade of the forest prepared by trenching and the extinction of the brush-wood. The bleaching process is done by exposing the fruit to the fumes of sulphur in closed receptacles, and thereby transforming the dingy grey hue into a delicate pale straw colour. This process, while perhaps not appreciably detracting from the quality or flavour of the plants, improves the appearance of the fruit, and secures a better price for it.

* *

Medicine and Water. Professor J. K. Lloyd, the present President of the American Pharmaceutical Association, is a disciple of the eclectic school of therapeutic treatment, and a regular contributor to the *Eclectic Medical Journal*. His position as a professor in one of the medical colleges of the east has enabled him to acquire a very intimate knowledge of the medical flora of the United States, as well as other subjects which the ordinary pharmacist has little chance of investigating. For example, in the above-named journal, he calls attention to the liability of small quantities of drugs in presence of large quantities of water undergoing change. He had dispensed a mixture, composed of 10 drops of tincture of pulsatilla in 4 oz. of water, and observed that in a few days the herby taste of pulsatilla had given place to a decided bitterness, and at the same time a fungoid growth developed. Similar observations were made with other medicines, and it was found that in all cases decomposition set in rapidly after the first day, owing, of course, to the fact that the small amount of organic matter in the mixtures formed a fertile field for micro-organisms, and heat helped to stimulate their growth. Obviously, the activity of the medicine must alter in these circumstances, and, referring to this, Mr. Lloyd says:—"This phase of the subject has been neglected, perhaps to the disadvantage of the profession and the injury of the patient. If the delicate equilibrium of a remedy is overcome, injured by simply standing in contact with water, physicians should either make their visits often enough to keep fresh dilutions of their own mixing, or should leave a small amount of the concentration with directions to the nurse, and in my opinion these dilutions should be freshly made each day." These remarks apply more particularly to homeopathists and eclectic dispensing, but there is a growing habit amongst medical men in this country to prescribe minute doses of tinctures and wines in aqueous mixture, and the fact must be enforced that this is not the most desirable way of prescribing such medicines.

Obituary.

CLARKE.—On April 25, at his residence, 13, Wellington Park, East, Mr. John Clarke, formerly of the firm of Messrs. Cox & M'Mullan, and since of the firm of John Clarke & Co. (Limited), wholesale druggists, Belfast.

TRNKÓCZ.—The Nestor of Austrian pharmacy, Apotheker in Trnkócz, died at Strassnitz, in Moravia, on April 19, aged 83. He obtained his diploma of pharmacy at Vienna in 1833, and from that time to his death has been actively engaged in his profession. All his five sons are also pharmacists. On December 14, 1885, Mr. Trnkócz celebrated at the age of 80th birthday, his golden wedding, and his thirtieth anniversary of his admittance into the pharmaceutical craft. On that occasion he received the freedom of the city where he was engaged in business, and was appointed an honorary member of the Austrian Pharmaceutical Society.

WROBLEWSKI.—Sigmund Wroblewski, Professor of Experimental Physics at the Jagielloni University in Cracow, Galicia, died on April 16, in consequence of accidentally contracted injuries. Professor Wroblewski was born in 1848 at Podno, in Russian Poland, and studied chemistry at St. Petersburg and Strasburg, subsequently visiting various places in Germany, France, and England for the purpose of collecting his studies. Wroblewski's name first became known in connection with a treatise on the manufacture of the carbohydrates and various papers on the action of gases, which caused the Vienna Academy of Sciences to award him the "Baumgaertner" prize, and to add his name to its list of honorary members. In 1882 Wroblewski was called to the chair of experimental physics at the Jagielloni University of Cracow, where he continued working at his system of joining his sporadic researches on liquid gases into one single comprehensive theory. Wroblewski wrote a large number of papers on the diffusion, absorption, and liquefaction of gases, on the properties of various bodies at the lowest temperatures, and under high pressure, on the laws of microphony, on the constitution of physical science in modern France, and on the manner in which air has been liquefied.

WEEKS.—At Stapleton Road, Bristol, on May 9, Mary Ann, wife of Albert J. J. Weeks, chemist and druggist. Aged 46.

PARLIAMENTARY NEWS.

THE PHARMACY BILL.

The Pharmacy Acts Amendment Bill appeared again in the orders of the day in the House of Commons on Tuesday last, but the few members present managed to monopolise the whole of the evening in discussing what were practically abstract resolutions, and the twelve o'clock rule precluded the chance of making any advance with this Bill. The prospect of its passing into law this session are, of course, growing weaker as the session goes on, and when the Whitsun recess has passed it is considered probable that the Local Government Bill and Supply will occupy the exclusive attention of Parliament.

Petition in favour of the Bill was presented to the House of Commons on Tuesday by Sir H. Roscoe from the Royal College of Physicians of Edinburgh.

CAFFEINE.

Notice has been given in the House of Commons by Mr. Bartley to ask "Mr. Chancellor of the Exchequer whether he can now see his way to frame regulations to allow the importation duty free of tea unfit for human food, with precautions to prevent its getting into the market, for the purpose of the production of caffeine, a chemical industry which our present Custom House regulations drives (sic) secretly to Germany." The question is down in the paper for today.

LEN.—"Mamma, what is a *casus belli*?" Mamma: "My child never speak of anything so indelicate. It is the Latin for stomach-ache."

AT THE COUNTER.

"COSKETI OF SODA" is the unnecessarily foreign looking appearance given to caustic soda by a Kentish customer.

"Do you rectify mistakes here?" asked a gentleman, as he stepped into a druggist's shop. "Certainly, sir, if the patient is still alive," replied the urbane assistant.

"Boy enters my shop," writes Mr. Haywood (Birkenhead) "for 'pennorth of dye.' In answer to 'What colour?' he replied, 'Red.' Returns shortly with it, and startles us by saying: 'Mother says she wants white dye.'"

MR. S. DEANS (Roman Road), sends the following order for henbane seed:—"Its like caerwayugy seed, it to draw the magets out the mout it a good cure for the newer relder—the name is like hermon seed."

USUAL SCENE. Enter nice-looking girl who asks for a cake of Pears's soap. As the gallant assistant hands it over, he asks his customer, "What is the difference between Pears' soap and a camel?" "I can't do conundrums." "Well, Pears' soap washes the beautiful, and the camel scours the plain." Girl pays the full price with a smile.

THE WRONG SHOP.—Stranger in a Kansas drug store: "I want to get 50 cents worth of calomel." Proprietor: "Fifty cents worth of what?" "Calomel." "What is calomel?" "Don't you know? What sort of a place are you keeping, anyhow?" "This is a drug store, and if you want anything don't sling around any fancy names. Is it a pint or a half pint you're after?"

APROPOS OF THE SALE OF CIGARS BY DRUGGISTS, there is a story of an old-time pharmacist who submitted to custom so far as to sell cigars, but would neither smoke himself nor allow smoking in his store. A customer who attempted to light the cigar he had just bought was informed of this rule of the establishment, and with considerable apparent surprise asked an explanation, since one who sold cigars must certainly expect them to be smoked. "Oh, yes," the pharmacist answered, "we sell compound cathartic pills, too, but we don't permit their effects to take place in the store."

THE *Lancet* is very disappointed with Mr. Goschen for not abolishing the medicine-stamp tax. "The tax," it says, "is so mischievous as an advertisement for pernicious compounds, and so oppressive as a burden upon useful ones, that it ought at any cost to be at once repealed. When it is added that the cost of repeal would be no more than 150,000*l.* a year, the case against it is complete, and wants no more the weight of argument, but only the propelling force of organised effort." The *Lancet* has yet to discover that useful medicines for dispensing purposes which are not advertised as panaceas are not taxed.

POISONING CASES.—On Monday, John Foster Parkinson, 52 (staying at the Crown Hotel, Grange-over-Sands), committed suicide by swallowing half a bottleful of a strong solution of chloral. The unhappy man was at one time manager of the Skipton branch of the Yorkshire Bank, which position he lost last year. He had been staying at Grange since April 26, and apparently meditated suicide, for on his toilet-table was a paper, on which was written in a firm hand, "Wire to Mr. Marshall, solicitor, Lancaster, and Mr. Arthur Stockdale, Skipton." Two letters were found directed to the same gentlemen, also a 4-oz. bottle of laudanum in a hand-bag.—William Holgate, the Bradford hawk, has been committed for trial on a charge of poisoning his daughter Lily with carbolic acid.—Last Sunday, John Martin (21), a labourer at Plymouth, failed to effect a reconciliation with his sweetheart, and became so despondent about the matter that he went home and swallowed 2 oz. of carbolic acid, which caused his death after several hours' great agony.

Trade Report.

Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

42 CANNON STREET, E.O., May 10.

QUININE has almost monopolised attention in the drug market this week, a recovery of fully 2*d.* per oz. having taken place since our last report. Camphor also is decidedly better, and citric acid commands a slight advance. But quicksilver is easier in the second hand; and among heavy chemicals, bleaching-powder, caustic soda, nitrate of soda, and oxalic acid have not quite maintained their position. Cod-liver oil is very firm, and cinchona sold at a decided advance on Tuesday. There is, however, more weakness in anise, caraway seed, and orris root. Spices are mostly weak, cloves, clove stems, white pepper, and cassia lignea having declined, and only ginger, nutmegs, and chillies being a little better in value. Mogadore olive oil is held at a slight advance. As regards drysalteries, shellac is lower all round. Orange lac kept up fairly well at the auctions, but since then TN for delivery has declined fully 2*s.* per cwt. Garnet and button are also cheaper. Block gambier is steady, and pumice-stone is reported much dearer. Gum arabic lower for Ghatty, Amra, and Australian; ordinary copal and Kowrie gums are also easier, but the finer grades sell steadily. Zanzibar gum amine full up. Soy again lower, and tea also easier.

BUSINESS RELATIONS WITH THE SOUDAN.—It is said that Mr. Howorth, one of the members for Manchester, will shortly introduce to Lord Salisbury an influential deputation of merchants and others connected with the trade with North-Eastern Africa, for the purpose of urging upon the Government the desirability of affording its powerful assistance in again opening up as soon as possible commercial relations with the Eastern Soudan.

THE BOARD OF TRADE RETURNS for the month of April afford additional evidence that the improvement in our national trade is well maintained, especially if it is taken into account that last month comprised seven non-working days, against only six in April 1887. Our imports last month were valued at 32,098,693*l.* against 31,149,925*l.* in April 1887, an increase of 948,768*l.*, or, say, 3 per cent. One of the largest proportional increases is in chemicals and dyestuffs, of which we imported nearly 27 per cent. more than in April last year, the increase under this head during the first four months of the year being fully 15 per cent. During that same period our total imports figured up to 123,978,878*l.* against 123,423,071*l.* in the corresponding part of 1887, an increase of fully 4½ per cent. The exports of British and Irish goods during April have increased proportionately even more than the imports. They were worth 17,735,474*l.* last month and 16,411,662*l.* in April 1887, a growth of 8 per cent. in round numbers, and of 5½ per cent. (74,353,875*l.* against 70,477,613*l.*) for the period from January 1 to April 30. The bulk of this increase is in the various categories of manufactured goods, drugs and chemicals having increased during the four-months period from 2,290,015*l.* in 1887 to 2,371,630*l.* in 1888, and medicines proper from 274,379*l.* to 304,090*l.* Our transit, or, to speak more correctly, our re-export, business is the only department showing unsatisfactory statistics, the total value of the exports of foreign and colonial produce being 5,746,339*l.* in April 1887 and 5,100,207*l.* in April 1888, a falling-off equal to 11½ per cent. for the month, and 5 per cent. for the four months (from 20,590,665*l.* to 19,607,926*l.*).

ACID (CITRIC).—Although it is said that the price of lemon juice in Sicily is lower, a large business having been

done at 19*l.* 17*s.* 6*d.* to 20*l.* f.o.b., the market for acid on the spot has improved a little, and 1*s.* 7*d.* per lb. is asked on the spot, with 1*s.* 7½*d.* for forward delivery. *Laves'* price on the spot is said to be quoted at 1*s.* 7½*d.* per lb.

ACID (OXALIC) very weak at 3½*d.* per lb. *Sal etos*, 5½*d.* nominally.

ACID (TARTARIC) dull, with little business. *Foreign* at 1*s.* 5½*d.* to 1*s.* 6*d.*, *English* a trifle higher. Although makers complain that the present prices leave scarcely any profit, new works are being constantly started. A new one has just been completed in Germany, and another one is being built, though it will probably not be in working order for some months yet.

ALOES.—At the end of last week the steamer *Pembroke Castle* brought 156 cases from Mossel Bay. For good bright hard *Cape* 26*s.* per cwt. is required.

ALUM.—The demand is looking up a little, but there is no alteration in price. Ordinary lump, according to mode of packing, 5*l.* 2*s.* 6*d.* to 5*l.* 7*s.* 6*d.*; ground alum, 4*l.* 15*s.* to 5*l.* 17*s.* 6*d.* per ton.

AMMONIA SALTS.—*Carbonate* very quiet at 4*d.* per lb. less 20 per cent. *Salammoniac* somewhat more lively, though 34*s.* is still quoted for first, and 32*s.* for second quality. *Sulphate*, after declining rather sharply, closed steadily at 11*l.* 6*s.* 3*d.* for 24 per cent. grey, and 11*l.* 12*s.* 6*d.* for Beekton sulphate; Hull and Leith at 11*l.* 5*s.* 6*d.*

ANISE.—*Russian* seed is obtainable at very low prices from 18*s.* per cwt. upwards, according to quality. *Spanish* remains very steady at 52*s.* per cwt. for the best, *Portuguese* and good *Italian* is worth from 40*s.* up to 45*s.* per cwt. Good *Chinese Star anise* is scarce here; while in China the stock is said to be an extremely small one, and prices are much above London parity are asked for forward delivery.

ARGOL.—Sixty-four bags *Cape* argol offered at auction were mostly disposed of, at 99*s.* for good bright old white dark to good, but dusty, grey, 75*s.* to 81*s.*; small dusty red 71*s.* per cwt.

ARSENIC remains very firm and scarce, at 12*s.* 6*d.* to 13*s.* for best white powder; lump, 24*s.* per cwt.

BLEACHING POWDER very quiet, and price must be quoted a shade lower, at 8*l.* 10*s.* here, and 7*l.* 10*s.* on the Tyne.

BORAX.—A steady feeling prevails, but the price remains unaltered, at 29*s.* to 30*s.* per cwt.

BROMINE.—Nothing new. *Bromide of ammonium* is worth 1*s.* 11*d.* per lb. *Bromide of potassium* firm, up to 1*s.* 7*d.* per lb.

CAMPHOR.—*Crude* is dearer and closes very fully. Business in Japan camphor at 77*s.* 6*d.* per cwt. is reported, though no particulars are given, and holders are asked 80*s.* It is said that the position in Japan is a very sound one. *English refined* camphor firm, at 1*s.* 2*d.* for blue, 1*s.* 0½*d.* to 1*s.* 1½*d.* for flowers, and from 1*s.* 2*d.* to 1*s.* 7*d.* per lb. for tablets, according to size.

CANARY SEED is extremely dull, there being scarcely any demand worth mentioning, either for home or export trade. *Dutch* seed is held at 43*s.* to 47*s.*, *Turkish* at 43*s.* to 45*s.*, *Mogadore* at 48*s.* to 50*s.*, and *Spanish* at 53*s.* to 55*s.*

CARAWAY SEED remains depressed, with a downward tendency. A very good crop is expected in Holland, and the old stock, moreover, is by no means cleared off. Under these circumstances there is far more anxiety to sell than to buy. From 24*s.* to 25*s.* is quoted for *Dutch*, and 20*s.* to 21*s.* per cwt. for *Russian* seed.

CASCARA SAGRADA remains extremely dear, and on the spot 70*s.* per cwt. is asked by some holders, though others are said to offer at 60*s.* per cwt.

CINCHONA.—Tuesday's auctions were rather usual, including only 2,452 packages, viz., 898 from South America, 1,309 from Ceylon, 211 from British India, and 34 from Java. The assortment was only a fair one, the Indian barks being decidedly the best in this respect. In accordance with the general expectation, the auctions showed some improvement, competition being somewhat more active and holders less inclined to sell. The unit averaged 2*d.* t

though we have in some quarters heard it put as high as or nearly 20 per cent. above the previous auctions. Little was bought by European manufacturers, the bulk being secured by the agents of an American quinine works. Very great importance is attached to the improved tone which prevailed at the sales, and its effect upon the quinine market will probably not be very pronounced. The following prices were paid:—**CEYLON BARK**, the whole of which was disposed of: *Succirubra*, dust, 1*d.*; branch, 1½*d.*; branchy chips, 1½*d.* to 3*d.*; stem chips, 2½*d.* to 4*d.*; spoke shavings, dust to good bright, 2½*d.* to 5*d.*; root, common to good, 2*d.* to 4*d.*; quill, dull and broken, 3½*d.*; druggists', weak and ranging in length to fairly good bold, 3½*d.* to 5½*d.*; renewed, very to good, 2½*d.* to 6½*d.* *Officinalis*, natural dust, 4½*d.*; chips, 2½*d.* to 4½*d.*; spoke shavings, bright, 4*d.* to 5*d.*; root, 6*d.* to 9*d.*; renewed, 5½*d.* to 8½*d.* *Hybrid*, chips, weak, 1½*d.* to 2*d.* *Ledgeriana*, fine stem chips, 9½*d.* to 10*d.*; spoke shavings, 4½*d.*; root, 11*d.*; quill, broken, 11*d.*; renewed, 3*d.* to 4*d.* **INDIAN BARK**, of which 211 packages sold: *Succirubra*, from Wynaad plantation, branch chips, 3½*d.* to 4*d.* shavings, 2½*d.* to 4½*d.*; root, 3*d.*; renewed, 5*d.* to 6*d.* *Calisaya* and *Ledgeriana*, branch, 1*d.*; chips, 6*d.* **JA BARK**, 34 packages all sold: *Succirubra*, chips, 3½*d.*; bark, 6½*d.* to 7*d.*; ordinary quill, 4*d.*; hybrid, quill, long and bright silvery, 8*d.*; *Ledgeriana*, chips, 5½*d.*; ordinary quill, 5½*d.* **SOUTH AMERICAN BARK**.—Of 898 packages, 427, mostly old *Maracibo*, sold as follows: Dull to fair bright, 1½*d.* to 2½*d.*; *Columbian*, soft old, 1½*d.* to 2*d.*; *Cuprea*, 4½*d.* good *Calisaya* quills from the Bolivian plantations, 8½*d.* per lb. The exports from Ceylon during the periods from October 1 to April 12 have been: In 1887-8, 5,839,5 lbs.; 1886-7, 8,031,374 lbs.; 1885-6, 7,929,888 lbs.; 1884-5, 4,971,623 lbs. Last week nearly 340,000 lbs. were shipped from the island.

CRAM OF TARTAR steady at 121*s.* 6*d.* to 122*s.* for first wh., and 118*s.* for seconds.

MALE SEED steady. *Malta* seed is worth 50*s.* per cwt. on the spot, and *East Indian* does not offer under 37*s.* per cwt., according to quality.

CRU.—We only hear of comparatively small sales at fair prices, viz., 31*s.* for *Star B*, and 30*s.* 6*d.* for *MM* in small lots.

LOT OF RYE.—It is stated that *Russian* ergot has been sold privately at 1*s.* 4*d.* per lb. The exports of ergot from Vigo in Spain were in 1887, 22,440 kilos., worth 5,385*l.*, and in '86, 17,302 kilos., worth 3,175*l.*

EGYPTIAN SEED very firm at 8*s.* 9*d.* to 9*s.* per cwt. for fair good *Mogadorc*. *Egyptian* seed is worth 6*s.* 9*d.* to 7*s.*

LANGAL quiet at 7*s.* 3*d.* to 7*s.* 6*d.* per cwt.

CHIEF.—*Block* was in better request at the beginning of the week and realised up to 22*s.* Since then, however, sales have been made on the spot at 21*s.* 10½*d.* per cwt. At the close the article has again recovered to 22*s.* on the spot, which has been paid. At the weekly auctions several lots of *cub strips*, and *flakes* were offered, but none of these were sold.

CEYLAN ROOT.—In Italy the supply remains small, although quite lately a few lots have been placed on the market, and found purchasers at 16*s.* per cwt. f.o.b. Between this price and 16*s.* 6*d.* remains the quotation at Leghorn.

GLYCERINE.—In explanation of the rumour which we reported in our issue of April 23, to the effect that German manufacturers had agreed to reduce their price in Germany, it is pointed out that an agreement had been for some time existing between several German manufacturers to keep up the price in Germany to a certain standard, viz., 150 marks for 30 s.g. double distilled, but this convention did not bind the contracting parties for any other country but Germany. It is said that for some time this agreement had become a mere nominal one, and it is even said that parcels of German glycerine were bought in England and reshipped to Germany, the importers paying the duty in their own country, and yet underselling the convention price. Under such conditions it was found useless to maintain the price officially agreed upon, and it was therefore reduced to the equivalent of 60*s.* to 62*s.* 6*d.* per cwt. for 1-230 s.g. in Germany packed in carboys. As the 1-230 s.g. glycerine contains

nearly 12½ per cent. water, against 1½ per cent. in the 1-260 s.g., generally quoted in this country, while, moreover, the sale conditions are different here to what they are in Germany, and the packing in cases is more expensive than that in carboys, the new German price is equal to fully 70*s.* per ton for s.g. 1-260 London terms, the figure now quoted by the London agents.

GOLDEN SEAL ROOT has become very much dearer recently. It is stated that sales have been made in New York at the equivalent of 3*s.* 10*d.* per lb. London terms.

GUM ARABIC.—About 2,700 packages were offered at auction to-day, two-thirds of this quantity consisting of *Amrad* and *Ghatti* gums. There was an almost entire absence of demand for these varieties, and only a few lots were sold, at a decline of from 3*s.* to 5*s.* for *Ghatti*, and at rather lower rates for *Amrad*; fair to good palish *Ghatti* bringing from 52*s.* 6*d.* to 65*s.*, while some very fine bright gum sold at 125*s.* per cwt. *Indian Amrad* realised from 50*s.* to 79*s.* for ordinary to good amber drossy; 38*s.* 6*d.* to 40*s.* 6*d.* for red and dark mixed; 28*s.* to 30*s.* for ordinary dark red siftings; and 22*s.* to 25*s.* per cwt. for pickings. *Cape* gum sold at 63*s.* for fair even brown; 95*s.* for soft frosty amber; and 127*s.* 6*d.* for good small pale gum. *Australian* arabic much lower, some lots showing a decline of 7*s.* 6*d.* per cwt., others less; good bold reddish dross, 62*s.*; fair, 60*s.*; dark mixed and woody 56*s.* 6*d.* per cwt.

HONEY.—*Chilian* is arriving in heavy quantities. The *Magellan* brought us 403 barrels last week.

IODINE still unaltered at 9*d.* per oz. for *crude*, and 13*s.* 6*d.* for *resublimed*, but an advance would not, in the opinion of some, be quite unexpected. *Iodide of potassium* may still be had at 11*s.* 3*d.* per lb.

IPECACUANHA.—Another parcel of 68 packages has arrived this week *via* Antwerp.

JUNIPER BERRIES.—There is now very little left in stock in Italy. Good berries of the new crop are quoted at the rate of 13*s.* to 13*s.* 6*d.* per cwt.

MATICO.—A consignment of 54 packages, per *Magellan*, from Valparaiso, which arrived at the end of last week, may not improbably have the effect of causing some decline in the price.

MERCURIALS.—The following are the present quotations for wholesale quantities: *Calomel*, 2*s.* 11*d.*; *Corrosive sublimate*, 2*s.* 3*d.*; *Mercury* and *Chalk*, 1*s.*; white *Precipitate*, 3*s.* 1*d.*; red *ditto*, 3*s.* 2*d.*; *mercurial Ointment*, 1*s.* 10*d.* per lb.; *Blue pill*, 1*s.* 11*d.* per lb. *Vermilion.*—At the last drug sales 2*s.* 6*d.* was accepted for Chinese, while English offers at the same price.

MORPHIA remains very neglected, and low prices would be accepted for some second-hand lots.

NUX VOMICA.—Since the shipments last reported another heavy arrival of 782 bags (per *City of London* from Calcutta) has taken place, but these shipments are said to have been mostly sold already. The crop is now all on the way, and it is thought that the price of strychnine will remain firm.

OIL (COCONUT).—There is hardly any business doing, and *Ceylon* oil, for which on the spot up to 24*l.* is asked, offers for forward delivery at 23*l.* 5*s.* *Cochin* oil, 27*l.* to 27*l.* 10*s.* on the spot. *Mauritius* unchanged at 25*l.*

OIL (COD-LIVER).—The lowest price is still 68*s.* per barrel c.i.f., although other makers hold at 75*s.* London terms, and from Norway much better reports continue to come in. Since the end of April the Finnmarken fishing has yielded practically nothing.

OILS (ESSENTIAL).—*Cassia* is offering at 3*s.* per lb., but there do not appear to be any buyers at that figure. English distilled oil of *anise* is quoted at 8*s.* 6*d.* per lb. *Caraway* is held at 6*s.* per lb. for the best, while *Cloves oil* (English distilled) may now be had at 5*s.* per lb. *Citronella* neglected at 1½*d.* to 1*d.* per oz. for native brands. *Ceylon* exported in the periods between October 1 and April 12: 1887-8, 4,871,746 oz.; 1886-7, 4,695,168 oz.; 1885-6, 1,248,969 oz. *Otto of Rose* is very firm indeed, and the agents report a steady trade on the basis of 20*s.* 6*d.* per oz. f.o.b. Con-

stantinople for well-known brands. *Peppermint*, American, H G.H. steady at 10s. 6d. Japanese dull, 3s. 6d. to 4s. 6d. for ordinary brands; but Cocking's is quoted 5s. 3d. per lb. Italian oils are unaltered at the last quotations, though *Lemon* is perhaps a shade easier for the better grades. In Southern France the violet crop is now finished, and the pomade will be very dear. Rose and orange flowers are now being worked for pomade and water, and it is said that full prices may also be expected for these crops.

OIL (OLIVE) remains quiet for all descriptions except *Mogadore*, for which owners now ask 33l.; *Messina* oil is held at 34l.; *Spanish*, nominally, at 37l. On the Genoese Riviera and in Southern France oil-pressing is still going on, and will not be finished until towards the end of the month. The oil which is now being made is of high-grade quality, as it is pressed from sound olives, and the process of pressing has been much improved of late. France, formerly the best customer of these Italian oils, does not take so much since the tariff has been so considerably raised. From Bari, the principal oil centre in Southern Italy, a large business, especially with Eastern Europe, is reported, but prices still remain low.

OILS (VARIOUS).—The following are the current quotations of some of the principal oils:—*Cotton-seed oil*—Spot, crude, 19l.; refined, 21l. to 21l. 10s. *Linseed oil*—Spot, 18l. 5s. to 18l. 7s. 6d.; Hull, 18l. 2s. 6d. to 18l. 5s. *Petroleum*, quiet; American spot, 5½d. to 5¾d.; Russian spot, 5d. *Rape*.—Brown, spot, 22l. 10s. to 22l. 12s. 6d.; refined, 24l. *Turpentine*.—American spot, 28s. 9d. to 29s.; June-August, 28s. 9d. to 29s.; September-December, 26s. 6d. to 26s. 9d. per cwt.

OPIUM dull, though there is a little more doing in soft shipping. The reports which reach us from Smyrna become more and more sanguine, as the prospects of the crop seem to grow better every day. Both in Turkey in Asia and in Europe the weather remains exceptionally favourable, and the general expectation is that the coming harvest will yield from 8,000 to 10,000 baskets.

ORRIS ROOT.—The extreme prices established some time ago in Italy are only nominally maintained, as the demand has fallen away, and holders would no doubt be willing to accept lower rates, though they still ask for 44s. to 50s. 6d. for *Florentine*, and 21s. to 26s. for *Veronese* root, according to quality.

POTASH SALTS.—*Bichromate* steady at 4½d. per lb. *Chlorate* remains firm, though there are not many orders about; 5½d. to 5¾d. per lb. is the nearest price. *Yellow Prussiate* sells slowly at 6½d. per lb., and is rather neglected.

PUMICE STONE.—A company has been formed with the purpose of monopolising the entire production of the Island of Lipari, hitherto in the hands of several competing producers. Selected stone in casks is now quoted at the rate of 7s. to 9s. per cwt. f.o.b.; extra quality up to 15s. per cwt. f.o.b. There is still stock in the hand of outside holders, but when this is used up still higher prices are expected.

QUICKSILVER.—The importers have made no alteration in price yet, although, owing to the very heavy arrivals, our stock must have much increased lately. Second-hand holders are much easier, and have done business as low as 6l. 15s., but at the close 6l. 16s. 3d. has again been paid.

QUININE.—At the end of last week the agents for the B. & S. quinine reported a sale of 50,000 oz. in bulk for the United States, at 1s. 4d. per oz., and several other sales, though none of them so important, are said to have been made during the week. The *Brunswick* factory sold for delivery as far as September at 1s. 4d. per oz., but nevertheless it did not seem quite so easy a matter to buy anything on the spot at that price, or even a little more. After the bark sales a good many speculative buyers entered the market, but the agents refused to go on at 1s. 4d. per oz. On Wednesday and Thursday a good business at improved values took place. *Jobst & Zimmer's* brands are quoted at 1s. 5½d. on the spot; *Amsterdam* at 1s. 5d. to 1s. 5½d. The *Mannheim* agents are said to have sold a small parcel at 1s. 6d. per oz., although there is no confirmation of this price; they have for the moment withdrawn from the market. *Brunswick* has been done up

to 1s. 5d. *Italian* quinine is quoted at 1s. 6d.; and *Kiffin's* having sold at 1s. 5d. on Wednesday, is quoted per oz. to-day. *Howard's* price is unchanged. It is said that in America the price has advanced above London parity.

SHELLAC.—At the weekly auctions 1,040 chests were offered for sale, mostly without reserve. Nearly the whole of this supply sold at fairly satisfactory prices so far as the better brands are concerned. *Orange* lac sold irregularly, a few lots at full prices, but mostly 6d. to 1s. per chest, the last lots obtaining the highest rates. *Garnet* lac may be quoted 1s., good *button* also 1s., and ordinary ditto from 2s. to 3s. lower. The following prices were obtained:—*First orange*, fair, worked G in double triangle, 58s. *Second orange*, worked, good pale, 45s. to 45s. 6d.; fair, 42s. to 44s.; livery to fair, 41s. 6d. to 42s. 6d.; unworked, common blocky to fair livery, 40s. to 43s. per cwt. *Garnet* AC, good free, 34s. 6d. to 35s. 1d., one lot realising 35s. 6d.; unworked, 34s. to 35s.; OCC, free, 34s. to 34s. 6d. *Button*, worked fair to good bright first, 52s. to 54s.; ordinary second, 47s. to 49s.; good third, 35s. 6d.; fourth, 31s. per cwt. The statistical position of the article becomes more and more unfavourable, although the shipments from Calcutta to the United Kingdom have not been quite so heavy last month, being 9,000 cwt. against 12,700 cwt. in April 1887, and 11,900 cwt. in April 1886. Since the auctions standard *Orange* (N) has sold at 42s. c.i.f. terms, June-August shipments, and afterwards at 40s. for May-July.

SODA SALTS.—*Ash* quiet at 1½d. per degree landed. *Bicarbonate* unaltered at 5l. 5s. per ton from the warehouse. *Caustic soda* difficult of sale, and the quotations are only nominally maintained; cream would certainly not be worth more than 6l. 15s., white 60 to 70 per cent. 7l. to 7s. 5s. per ton. *Crystals* are extremely firm at 46s. here, and 5s. 6d. to 40s. on the Tyne. *Nitrate* easing off, 9s. 3d. to 10s. 6d. being quoted on the spot, according to quality.

Soy tending downwards, supplies being considerably in excess of the momentary requirements. *China* is coming at 1s. 5d. per gallon.

SPICES generally dull—ginger, nutmegs, and cloves excepted, for which at the weekly auctions better prices were paid. *Arrowroot* lifeless; only a few lots of *Natal* sold at 1½d. to 1¾d. for old medium without reserve. *Cassia* *Lignea* depressed; about 200 boxes small sold at 21s. without reserve. *Chillies* show some improvement; fair to good bright Zanzibar 30s. 6d. to 32s. 6d. *Cloves* rather lower, especially for ordinary dark Zanzibars, which sold at 6¾d. to 7d.; good bright fetching 7½d. to 7¾d. There is a large supply offered. *Clove stems* cheaper, at 1½d. per lb. *Ginger* full up, and occasionally slightly dearer. *Cochin* well inquired for at 2s. 6d. for fair rough; 41s. to 65s. 6d. for medium to good old cut. *Jamaica* sold well at 38s. 6d. to 45s. 6d. for baton; small to medium washed, 59s. to 67s.; fair to the bold, 72s. 6d. to 100s. per cwt. *Nutmegs* very firm. *Pena* (111 to 112), 2s. 1½d.; *Bombay* (81 to 99), 2s. 7d. to 2s. 3d. (120 to 193), 2s. to 1s. 3d. per lb. *Pepper* quiet for black, and somewhat cheaper for white. Fair black *Aleppy*, 7s.; white *Singapore*, 11½d.; dull white *Siam*, 11½d. per lb. *Pimento* steady at 2d. to 2½d. for ordinary to good *Jamaica*.

TEA.—The *China* market continues extremely dull, dealers finding orders come in slowly, and being much more inclined to clear out old stock before new season's teas arrive than to make fresh purchases. However, there is a pressure to sell on the part of importers, and prices cannot be quoted lower. The first of the so-called "new season's" tea, being new makes were put on the market this week, but, being very poor and to all appearances largely mixed with old tea, they fetched low prices—up to 11½d. for the best. They were not, however, eagerly bought, and several lots which could not find buyers privately were sold on Thursday at public auction, together with another shipment at prices ranging from 8d. to 9½d. These, however, cannot be considered as a criterion of the crop, as they have been hurried to the market to be the first on the London market. Common *Kay's* sold on Wednesday at 3¾d. to fair common at 4½d., and some useful *Sormoos* sold on Tuesday from 4½d. to 5d. A few fine first crop *Monings* in Tuesday's sale fetched very high prices, though they were all second-hand teas. *Assams* are easier for all the lower grades. A large quantity of common broken

teas in the market have brought the market down almost $\frac{1}{2}d.$ per lb., and fair broken tea can now be had at $7d.$ to $7\frac{1}{2}d.$, and fair Pekoe Souchong and Souchong at $8\frac{1}{2}d.$ and $8\frac{3}{4}d.$ to $9d.$ Better grades are unaltered, teas from $11d.$ to $1s. 1d.$ showing as before a fair value, but anything really fine fetching very full price. *Ceylons* are freely offered, and slightly easier Pekoe Souchongs being obtainable at $10d.$, and good liquoring Pekoe Souchongs at $11d.$ Telegraphic advices from China received on Wednesday bring the information that the market for new season's Monings has opened at Kiewkiang, and the first cargo may be expected in the last week in June.

TURMERIC, quiet, and without alteration in value. Bold *Bengal* ginger, more or less wormy, has been sold at auction at $9s.$, a lot at $9s. 6d.$

WAX (JAPAN) remains neglected, although it is said that the poison in Japan warrants much better prices than prevail here. The last quotation for good white squares was $49s.$ per wt., but perhaps a trifle less might now buy.

THE AMERICAN MARKETS.

NEW YORK, April 27.

DURING the last three weeks a continued dullness in trade prevailed, which is unusual at this season—generally the time for the opening up of trade and brisk business until the advent of the extreme heat of summer, when there is again falling off until the approach of fall. The season, however, is exceptionally backward, the weather remaining cold a stormy until within the last few days, during which it has become more congenial, and this has had a tendency to depress trade in several articles that are generally lively at this period of the year. The two leading articles, opium and quinine, show considerable weakness.

ACID (CITRIC) has suddenly become very scarce; the home manufacturers are only delivering on contracts taken the last month or two back for future delivery at $50c.$ ($2s. 1d.$ per lb.) and take new orders for delivery not before June next. Meantime consumers having no contracts and in immediate want are obliged to buy foreign acid, which is also in weight stock, and held at $52c.$ ($2s. 2s.$ per lb.), $10c.$ duty, though there are one or two lots offering to arrive at $50c.$ ($1d.$ per lb.), which will certainly be soon taken up under the present scarcity. The outlook is bright for foreign acid, less it should be too heavily imported, the season of the latest consumption of this article being near at hand.

ASSETIDA.—Prime Calcutta gum is held at $9\frac{1}{2}c.$ ($4\frac{3}{4}d.$ per lb.); poor, stony, and dirty gum, such as sometimes comes into the trade, and is known as London gum, is not wanted here. It can be bought at $8c.$ ($4d.$ per lb.) or less.

BALM COPAIBA has declined somewhat on account of recent arrivals, and *Central American* is obtainable at $50c.$ ($2s.$), *Maranham* at $55c.$ ($2s. 3\frac{1}{2}d.$), and *Solidifiable* at $65c.$ ($s. 8\frac{3}{4}d.$).

BULFIDE OF POTASSIUM unchanged at $33c.$ ($1s. 4\frac{1}{2}d.$) for 1,000 lb. lots and upwards.

GREEN SEAL ROOT very scarce. Only small lots are offered, and at $85c.$ ($3s. 6\frac{1}{2}d.$).

INSECT POWDER unchanged. The season for this article being quite near at hand, the price is very firm at say $45c.$ ($1s. 4d.$) for the best brands. Contracts were made a long way ahead in this article by two large dealers here at about the price mentioned, and deliveries of these parcels are now taking place, while the circumstance of a sufficient supply being on hand for new orders keeps the price even, though under flowers at the present price of the latter would necessitate higher figures.

MACACUANHA.—Prime Rio is very firm at the late advance, from $\$1.85$ to $\$1.90$ ($7s. 8\frac{1}{2}d.$ to $7s. 11d.$) being the ruling quotations. The bulk of the stock is in the hands of one house, well able to hold it, and to maintain the price, at least until the present rate of supplies.

OIL (COD-LIVER).—*Norwegian* oil has declined considerably; good brands are obtainable at $\$23$ ($4l. 14s. 6d.$), and even as low as $\$21.50$ ($4l. 8s. 3d.$) for some brands.

OIL OF PENNYROYAL is held at $65c.$ ($2s. 8\frac{1}{2}d.$).

OIL OF PEPPERMINT is unchanged at the quotation of $\$1.80$ for prime Western in tins ($7s. 6d.$ per lb.), and $\$1.95$ for New York State ($8s. 1\frac{1}{2}d.$), commonly known as "Wayne County" in tins, while $\$2.35$ is the price for Hotchkiss oil ($9s. 9\frac{1}{2}d.$) in bottles.

OIL OF SASSAFRAS is held at $43c.$ ($2s.$ per lb.), including packages.

OPIUM is selling at $\$3\frac{1}{2}$, equivalent to $\$2\frac{1}{2}$ without duty ($8s. 10d.$) in single case lots, and $\$2$ in bond ($8s. 4d.$) for lots of 5 cases and upwards; and this in the face of recent cables quoting an advance of $8d.$ abroad ($8s. 8d.$). Upon receipt of these cable quotations the larger holders were for a while firmer, and inclined to ask higher prices for round lots; but there being one holder of but a few cases who was anxious to realise, and who continued to quote at previous rates, the increase which it was endeavoured to establish could not be maintained, mainly through lack of demand.

PINK ROOT, $28c.$ ($1s. 2d.$) for ordinary to $45c.$ ($1s. 10\frac{1}{2}d.$) for clean-washed root.

QUININE is even weaker than when last reported. The American manufacturers have reduced their price $3c.$ per oz., viz. to $46c.$ ($1s. 11d.$), and German is to be had at $35c.$ to $37c.$ ($1s. 5\frac{1}{2}d.$ to $1s. 6\frac{1}{2}d.$). The American manufacturers contemplate reducing their price still further on account of the great falling off in the quotations for foreign brands, but their new price will not be made known until the first of next month.

SAFFRON (so-called American, but really of Mexican growth) is quoted at $14c.$ ($7d.$ per lb.), a decline from $30c.$ ($1s. 3d.$ per lb.) in three months, on account of the exceedingly large supplies which have arrived on the Mexican market.

SARSAPARILLA.—*Mexican* is in moderate demand at $7\frac{1}{2}c.$ ($3\frac{3}{4}d.$), and *Honduras* at $20c.$ to $30c.$ ($10d.$ to $1s. 3d.$), according to quality.

SNAKE ROOT.—*Canada*, stripped, $20c.$ ($10d.$ per lb.) for prime quality.

VANILLA.—The approaching season is the one for the largest consumption of this article. *Mexican* beans are at present quoted $\$4$ to $\$12$ ($16s. 8d.$ to $49s. 4d.$), and $\$2.50$ to $\$5$ ($10s. 5d.$ to $20s. 6d.$) is the price for *Bourbon*.

IN the chemical laboratory; "Professor, what has become of Tom Appleton? Wasn't he studying with the class last year?" "Ah, yes; Appleton—poor fellow! A fine student, but absent-minded in the use of chemicals—very. That discolouration on the ceiling. . . . Notice it?" "Yes." "That's him."

DENTISTS IN VICTORIA.—This colony has just passed an Act to regulate the practice of dental surgery. The measure follows very much the lines of the British Dentists Act. It provides for the formation of a Dental Board, consisting of five dentists and three doctors, holding office for three years, and a Dental Register is to be compiled. It will not interfere with vested interests, all persons practising dentistry at the time of the passing of the Act, whether qualified or not, being entitled to register.

THE PATENT MEDICINE TRADE IN AMERICA.—Professor Chandler, speaking of the trade in patent medicines in the United States, says:—"There is a regular staff. There is the literary man, who writes the letters, giving marvellous accounts of marvellous cures; there is the artist, who shows the patient as he is before and after taking twenty-two bottles of the medicine; there is the liar, who swears to what he knows is not true; and the forger, who produces testimonials from his own imagination. Without exaggeration I should say that nine out of every ten of these patent medicines are frauds pure and simple. The real business is advertising for dupes. The medical part of it is but a side issue. I am pretty sure if I were to pound up brickbats and spend $\$100,000$ in offering it at $\$1$ an ounce as a sure cure for some disease which cannot be cured, I should get back $\$110,000$."

CHEMICALS IN THE NORTH OF ENGLAND.

OUR market still suffers from the uncertainty respecting the American tariff. For the present, buyers for the United States narrow their requirements as much as possible, and this results in weak or declining prices.

ACIDS.—*Tartaric* has been quiet at 1s. 6d., but the impression here is that an early revival of demand and improved values are not improbable. *Citric* is firmer at 1s. 7d., but *Oxalic* is weaker, and the nearest closing price is 3d. per lb. *Boric* is held at 23s. without finding buyers, and much lower rates would be accepted for forward delivery.

AMMONIA SALTS.—*Sal. Ammoniac* meets with more attention at 34s. for first and 32s. per cwt. for second quality. *Muriate* very steady at 23l. to 31l. per ton, according to quality. *Carbonate* somewhat more active at 3d. per lb., and *Sulphate*, after a further sharp fall, closes better and firmer at 11l. 5s. to 11l. 7s. 6d. per ton.

BLEACHING POWDER has been moving off slowly and is easier, quotations being on rails 7l. 6s. 3d., and f.o.b. 7l. 11s. 3d. per ton. The introduction of oxygen for bleaching purposes in the manufacture of paper is likely to have a serious effect upon the consumption of chloride of lime, which has hitherto been largely used for that purpose.

BORAX is very steady at 30l. per ton, notwithstanding that various quotations for Californian have been telegraphed from San Francisco. The failure, too, of the largest shipper and operator in California has caused a good deal of anxiety as to the effect upon our market. The opinion prevails here that prices will not be affected.

POTASH SALTS.—*Prussiate* without change and dull at 6½d. per lb. *Chlorate* meets with slightly more inquiry, closing at 5½d. per lb. *Bichromate* very steady at 4½d. per lb.

SODA SALTS.—*Soda ash* has been selling fairly well at 1d. to 1½d. per degree. *Crustic soda* is offering more freely, and the quotations, except for cream, are not so firm. Closing prices are:—Cream, 5l. 15s. to 5l. 17s. 6d.; 60 per cent. white, 5l. 17s. 6d.; and 70 per cent., 6l. 17s. 6d. per ton.

NOTES ON VARIOUS CHEMICALS.

MESSRS. C. F. BOEHRINGER & SONS, of Mannheim, in their last report refer to the position of various chemicals, observing, with regard to

ETHER.—During the month of April the price of alcohol has advanced by 6 per cent., and a further rise is expected. It is thought that it would be advisable to lay in stock for some time.

IODINE.—According to information received from a well-placed quarter, it may be expected that for the present the price will not vary unless in an upward direction. The convention has still a year and a half to run.

QUININE.—It is pointed out that several medical authorities have lately called attention to the evil which they allege to result from the excessive use of antipyretics, which only bring about a reduction of the temperature, but not a cure from the fever. Professor Parjesz prefers the use of quinine in typhoid fever to the water treatment or to certain antipyretics, quinine being, according to him, less violent and more lasting in its action.

SALICIN.—Owing to the lateness of the season, the willow trees are only now commencing to gather moisture, and the peeling of the bark can only be commenced within the next fortnight, so that the small stock of old salicin will have to supply the demand until the middle or the end of June.

SANTONIN.—The price required to purchase wormseed at the point of production has considerably advanced lately, as the scale of wages in Central Asia has been altered completely in consequence of the construction of the Central Asian Railway, the workpeople being now no longer obliged to resort to wormseed-gathering for an occupation. As soon as the old stocks are consumed prices may be expected to advance from 100 to 125 per cent.

BOARD OF TRADE RETURNS.

IMPORTS		Apr., 1886	Apr., 1887
Drugs, unenumerated ..	value £	60,565	52,629
Chemical manufactures and products, unenumerated ..	"	124,407	107,614
Chemicals & dyestuffs, unen. ..	"	224,989	238,581
Oils, not enumerated ..	"	71,989	2,610
Alkali	cwt.	5,878	5,680
.. ..	value £	4,082	3,519
Brimstone	cwt.	58,899	69,220
.. ..	value £	14,755	15,567
Nitrate of soda	cwt.	202,613	142,800
.. ..	value £	110,815	25,000
.. of potash	cwt.	26,105	30,947
.. ..	value £	22,301	27,089
Quicksilver	lbs.	452,700	881,400
.. ..	value £	36,264	88,300
Cinchona bark	cwt.	16,748	13,375
.. ..	value £	95,032	69,213
Gum Arabic	cwt.	3,871	2,394
.. ..	value £	11,212	11,837
Lac, seed, shell, stick, and dye ..	cwt.	11,396	11,192
.. ..	value £	34,394	28,570
Cinnamon	lbs.	154,718	82,226
.. ..	value £	6,230	3,431
Ginger	cwt.	9,709	13,435
.. ..	value £	21,092	27,706
Pepper	lbs.	1,641,641	2,221,842
.. ..	value £	43,148	65,125
Bark (for tanners' or dyers' use) ..	cwt.	31,319	38,445
.. ..	value £	15,149	17,191
Aniline	"	22,127	18,269
Alizarine	"	24,935	20,188
Other coal-tar dyes	"	360	585
Cochineal	cwt.	1,031	701
.. ..	value £	6,745	4,253
Cutch and gambier	tons	1,486	1,661
.. ..	value £	37,367	41,160
Indigo	cwt.	4,831	5,101
.. ..	value £	55,026	97,192
Madder, madder root, &c. ..	cwt.	1,417	563
.. ..	value £	1,848	747
Cocoa-nut oil	cwt.	16,822	13,745
.. ..	value £	23,627	20,036
Olive oil	tons	1,487	1,855
.. ..	value £	60,234	67,484
Palm oil	cwt.	69,716	62,816
.. ..	value £	69,613	60,916
Petroleum oil	gals.	3,176,015	6,886,310
.. ..	value £	83,722	190,777
Oil seed	tons	1,488	977
.. ..	value £	34,555	22,013
Tar-pentine	cwt.	5,697	11,435
.. ..	value £	7,195	15,246
EXPORTS			
British and Irish produce—			
Drugs and medicinal preparations, unenumerated ..	value £	59,780	62,784
Sundry chemicals	"	286,522	263,285
Painters' colours and materials ..	"	104,078	106,534
Alkali	cwt.	518,108	528,983
.. ..	value £	142,200	150,316
Bleaching materials	cwt.	130,105	122,425
.. ..	value £	37,616	45,234
Seed oil	tons	7,223	5,799
.. ..	value £	150,907	141,477
Soap	cwt.	38,695	35,502
.. ..	value £	40,462	35,314
Foreign and Colonial merchandise—			
Chemicals, unenumerated ..	"	7,513	24,391
Cinchona bark	cwt.	9,929	14,950
.. ..	value £	46,611	58,084
Cochineal	cwt.	1,069	714
.. ..	value £	6,972	4,627
Cutch and gambier	tons	859	864
.. ..	value £	21,296	22,076
Gum Arabic	cwt.	2,852	2,801
.. ..	value £	10,690	9,918
Indigo	cwt.	5,199	7,437
.. ..	value £	101,906	164,541
Lac, seed, shell, stick, and dye ..	cwt.	7,006	5,021
.. ..	value £	21,110	13,657
Cocoa-nut oil	cwt.	10,670	10,060
.. ..	value £	15,007	14,570
Olive oil	tons	232	312
.. ..	value £	10,018	12,282
Palm oil	cwt.	50,598	49,871
.. ..	value £	51,033	38,350
Petroleum oil	gals.	45,806	29,201
.. ..	value £	2,150	1,197
Quicksilver	lbs.	662,834	476,783
.. ..	value £	50,513	43,590
Nitrate of potash	cwt.	2,108	6,222
.. ..	value £	2,202	5,011
Cinnamon	lbs.	121,154	51,700
.. ..	value £	4,065	2,042
Pepper	lbs.	1,629,777	1,721,900
.. ..	value £	49,633	50,331



Memoranda for Correspondents.

Always send your proper name and address; we do not publish them unless you wish.

Write one side of the paper only; write early; and devote a separate sheet of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers, please mark what you wish us to read.

Ask nothing of pharmaceutical interest: we shall do our best to reply.

Before writing for formulae consult the last volume, if you have it.

Letters, series, &c., not noticed in this issue will, if possible, be attended to in the next week.

Pharmacy Bill.

SIR—Will you kindly allow me, on behalf of this Society, through the medium of your journal, to thank my numerous correspondents and yourself for the valuable assistance rendered with reference to the above Bill.

I have carefully noted the many valuable suggestions that have been made to me, and shall, if opportunity offers, endeavour to get some at least of them embodied in the Bill.

Many of my correspondents have mentioned cases where unqualified persons are contravening the Pharmacy Acts; but I think it would be a great assistance to the object we have in view if I were furnished with particulars relating to unqualified persons, giving the time during which they have been carrying on business, and the extent of such business, and mentioning any accidents occasioned thereby, and, where application has been made to the Pharmaceutical Society, the result of such application.

I have the honour to be, sir,

Yours obediently,

CHAS. R. TAYLOR

(Secretary of the Incorporated Society of Chemists and Druggists, Limited).

Boon House, 63 and 64 New Broad Street, E.C.

May 8.

SIR—I should like to add my experience of unqualified managers. Some six years ago I bought a business in a country village. This had been opened by a chemist who resided twelve miles away, and he placed a young man there to manage it for him. After the business changed hands this manager took a small shop in another part of the village, fitted it up like a chemist's shop, and called himself "Analyst, &c." He managed to make the community believe he had been properly treated, both by the vendor and the purchaser of the former business, and so got most of the customers with him. They could not understand why he was doing an illegal thing in having a shop of his own when he had managed the other business all alone for some time, and it took over four years of hard work, and the trial of much patience, before he was finally ousted. I may say he sold poisons, dispensed, and acted in every way as a chemist. He was too wary to be caught, although the Chemists' Trade Protection Society held him in the matter.

I will see I have not much sympathy with unqualified managers, although I am in favour of all *bona-fide* managers of certain number of years' standing being left alone in the present positions, but not to be placed on the register as chemists.

Of course, if the business had been managed by a qualified manager, should have ascertained whether he intended starting for himself in that place before I purchased. One does not object to competing with one who is doing the thing fairly and honestly, and is qualified. I also consider that proprietors of branch surgeries should have qualified managers, and also that dispensers at public institutions should be qualified chemists. There is no doubt all these will come in due time,

but now seems to be the chance for striking the iron whilst it is hot.

Yours truly,
SPES. (51/58.)

A. Laitram (Oxon) argues against the proposed concession to the unqualified managers, but as the subject has been well discussed, and a compromise has been (apparently) reached, we do not see any reason for continuing the controversy.

T. J. W. (Nottingham) (52/72) evidently understands our statement that the unqualified managers have practically won their case to imply that in our opinion they had the best of the argument. He argues this point at some length, repeating much of what has been already written on the subject. We meant simply that the discussion has been fought out in these columns. Both sides have stated their case, and the members of Parliament in charge of the Bill have consented to grant the concession asked for. It is quite certain that they could not pass the Bill unless they did so. Under these circumstances we do not see the use of printing long letters on the subject.

Council Election, 1888.

SIR,—Mr. G. F. Schacht is again a candidate for election to a seat on the Council of the Pharmaceutical Society. Up to the present it has been a pleasure to me to support that gentleman as an advocate of high-class pharmacy. But how are the mighty fallen! and the man we were once so proud to acknowledge as a leader has become a member of the firm of Giles, Schacht & Co., the "cutting" chemists, and thus, according to my idea, is disqualified for a seat on the Council.

Messrs. Benger, Martindale, Proctor, and Reynolds have done good service in pointing out the unsuitability of one of the candidates, and I think that equally unsuitable is the man who would degrade our calling to that of a mere huckster. Certainly he will not get my vote, and I hope there are enough members of the Society who think with me to keep both these unsuitable gentlemen out in the cold.

Faithfully yours,

Dawlish, May 9.

GEO. JNO. CUTCLIFFE.

[It is only fair to Mr. Schacht to state that he announced in this journal (July 24, 1886) that he has "no longer any part or control in the management of the general business of Giles, Schacht & Co.," though of course he must take whatever glory or discredit may attach to his nominal association with that firm.]

SIR,—Although I have never seen Mr. Wills, or know anything of him except having noticed his advertisements, I cannot help but expressing my opinion that his views agree with mine as to what is required of the Council to be of benefit to the languishing drug trade.

Education should, at present, be shelved, and give way to other more urgent and important matters in connection with the drug business.

As Mr. Wills seems to be the only one to boldly state his views, I have given him a plumper, as I do not know what claims the other candidates have for our votes, and I hope many will do the same and vote only for those who are likely to be of some benefit to the struggling army of druggists.

In great haste, I am, yours faithfully,

Bristol, May 9, 1888.

C. & D.

[If "C. & D." had not been in such "great haste," he would perhaps have observed that Messrs. Evans and Watt have both published statements of their views, as well as Mr. Wills, while one from Mr. Nichols appears this week.]

SIR,—The action of Messrs. Martindale and others is probably the best assistance to the return of Mr. Wills that could possibly have been given him. Those who before that manifesto were in favour of Mr. Wills will be strengthened in their opinion of the desirability of his return, whilst those who, like myself, would not have voted for him will now do so. This dread evinced by a section of the Society indicates

we have tried both Mr. Ince's formulæ as to whether "The H. Lotion" is really, as stated, "cream white and inseparable"—i.e., showing no tendency to deposit.

TULIP. (57/48.)

DISPENSING NOTES.

Opinions of practical readers are invited on subjects discussed under this heading.

Dispensers who have compounded any of the following prescriptions, or similar ones, are requested to communicate their results to the Editor.

The Explosive Mixture.

In reply to "Saccharine," I should say the most rational supposition is that his liq. hyd. perchlor. is acid, and consequently liberated CO₂ from the sp. am. aromat.; hence the explosion.

J. H. C.

Unusual Doses.

MR.—I have had the following mixture to dispense for a child of 2½ years. Is not the dose of aromatic spirit of ammonia, 15 minims, every three or four hours, excessive?

Potass. iodid.	..	..	..	gr. xvj.
Sp. ammon. arom.	..	..	..	3ij.
Vin. ipecac.	..	..	..	3iiss.
Aq. menthæ pip. ad	..	..	..	3j.

M. Cap. 3j. om. tertiis vel quartis horis.

Yours faithfully,

A COUNTRY CHEMIST. (38/25.)

The mixture is, doubtless, for a child suffering acutely from a bronchial affection, and in such cases large doses of ammonia give quick relief.]

Cough Mixture.

MR.—Could any of your readers give me an explanation of the following? I make a mixture as follows:—

Gum. acaciæ, E. I. mixed	..	..	1 oz.
Potass. carbonat.	..	..	1 drachm
Aquæ dest. ad..	..	..	40 oz.

Dissolve and add —

Glycerin.	..	..	7 fl. oz.
Vin. ipecac.	..	..	3½ oz.
Vin. antin. tart.	..	..	7 drachms
Spt. chlorof.	..	..	2½ "

When recently prepared the mixture is sweet and palatable, but after a time becomes bitter. What is the cause, and can be prevented? I was told that the E. I. gum, which otherwise unmanageable, could be made right by the addition of the tannic carbonate. This I found to be the case, and as it seemed to improve the mixture, I should like to retain it, though it would appear to react with the ipecacuanha wine.

SAL TARTAROS. (41/70.)

Salicylate of Soda and Cinchona.

In reply to *Sub Rosa* (52/9) we may repeat that mixtures containing salicylate of soda and acid infusion of cinchona throw down a flocculent precipitate of salicylates of cinchona alkaloids. If 15 minims of mucilage of acacia are added to each ounce of such a mixture, the precipitate does not adhere to the bottle.

LEGAL QUERIES.

44/19. *Zeta* says:—Two brothers intend commencing business in partnership in a small provincial town. The shop taken having two windows, the one side of the same will be occupied by a chemist, the other by a grocer. Could they, in conformity with the Pharmacy Act requirements, announce on the top of the building, "Jackson Brothers, Cash Supply Stores," though over one window appears, "E. A. Jackson, Grocer," &c., and over the other, "W. G.

Jackson, Chemist," &c.? Also, might they legally use a label worded thus:—"Jackson Brothers. Laudanum—Poison. W. G. Jackson, Dispensing Chemist," &c. [We assume that W. G. is qualified and E. A. is not. E. A. would not be entitled to hold himself out or to be a partner in a chemist's business, nor to have any partnership interest in the sale of laudanum.]

19/46. *Lex* asks:—Is it legal for a person to conduct a branch without a qualified (by examination) man in same town, providing he gives it a certain amount of supervision himself daily? [It is legal at present, but will not be if the Pharmacy Bill as it now stands should pass.]

8/47. *Seotus*.—There does not appear to be a trade-mark right in the word "chlorodyne," but of course you would be liable to an action if you should colourably imitate any established article.

4/211. *Dum Spiro Spero*.—We have often stated that according to the present interpretation of the Pharmacy Act, a limited liability company, even if composed wholly of unqualified persons, may trade as chemists. They must obey the regulations affecting the sale of poisons as much as anybody else. Unqualified persons may sell patent medicines containing poisons.

13/46. *Lindum*.—You, as a chemist, may sell pure spirits of wine in quantities not exceeding 8 oz. to medical or scientific men for purposes of medical or scientific research, without holding a spirit licence. For authority see *THE CHEMISTS' AND DRUGGISTS' DIARY*, 1888, page 166.

47/30. *W. E. M.*—You may not make tinct. benz. co. with methylated spirit. You may not make, sell, or keep any preparation with methylated spirit, if such preparation is capable of being used internally as a medicine.

47/70. *Verax*.—If A. B. comes to your shop for some aconite liniment, to be charged to the account of his friend, C. D., you will enter the sale in your poison-book, explaining the transaction, if you think proper to supply the poison. The purchaser is A. B. (for C. D.), and A. B. will, of course, sign. In selling to the public drugs not scheduled poisons, but which may be used for improper purposes, the law does not prescribe any formality, but ordinary humanity and common sense do. In the event of a felonious use being made of the drug you might get an unpleasant magisterial censure, and it is conceivable that under certain circumstances you might be charged as an accessory.

47/22. *Magnesia*.—A month's notice is usually given in the drug trade between master and assistant. In the absence of specific agreement this "custom of the trade" would be upheld by a court.

47/36. *Chemist*.—A widow cannot carry on the business of her deceased husband in her capacity of widow. The business must be carried on by executors, administrators, or trustees. But it is quite easy to make the wife executrix, in which case she would have the legal right to carry on the business with the assistance of a qualified assistant.

28/51. *J. R.*—The Pharmacy Bill, as it now stands, was printed in full in *THE CHEMIST AND DRUGGIST*, March 17, 1888. There is no proposition in it to restrict the sale of drugs beyond the poisons schedules now in force. The intended amendment in regard to unqualified managers would not give those gentlemen power to carry on business for themselves as chemists and druggists.

49/28. *Puzzled*.—You can only register the title of a proprietary medicine if the registrar will accept that title as a trade-mark. For instructions how to proceed in the matter

consult THE CHEMISTS' AND DRUGGISTS' DIARY, 1888. You do not seem to appreciate the distinction between criminal and civil proceedings. The imitator of Beecham's pills was found not guilty of obtaining money under false pretences in the criminal action, but a civil court has granted an injunction prohibiting his employment of Mr. Beecham's title. The cases were reported in THE CHEMIST AND DRUGGIST, January 14 and 21, February 4, and May 5. We cannot give you the formula for either Beecham's or Cocker's pills.

50/53. *Cinchona*.—Your label No. 1 would, we think, render the preparation liable to medicine-stamp duty, because you state that the chief ingredient is "of great service in blood disorders, &c." Nos. 2 and 3, we should expect, would not render the medicines liable. No. 4, we think, would be liable on account of the word "pectoral." No. 5 would very probably pass, but we are doubtful about it. We wish to remind you, however, that our opinions on labels cannot be conclusive. If you send them in duplicate to the Board of Inland Revenue you will be told authoritatively which render the medicines liable and which do not; then if you are in doubt about the reasons of the decision we will try to assist you.

51/57. *Hindoo*.—Your preparation is certainly liable to medicine-stamp duty. On the label, as well as on the hand-bill, you hold it out as beneficial in certain specified complaints.

14/52. *Rhei* gives particulars of his case, which is a hard one if correctly described; but he omits to tell us the essential details. He says he was apprenticed in North Wales in 1858, and became assistant in 1861. In 1866 he became assistant to chemists in Dublin, and was acting in that capacity when the Pharmacy Act, 1868, came into force. He wrote, he says, to the Registrar, but he does not tell us what statement he made to him. The answer, however, was "that the Act did not extend to Ireland, and that he could not be placed on the register." What we want to know is whether in the period between 1861 and 1866 "Rhei" was an assistant to a pharmaceutical chemist or chemist and druggist in Great Britain, and whether he stated this to the Registrar; also whether he applied for registration before December 31, 1869? We presume he was of full age in 1868. If he did all these things, and can prove having done so, the Registrar made an error, and it is probable that the Pharmaceutical Council could even now be compelled by a Court of Equity to admit "Rhei" to the Modified examination.

MISCELLANEOUS INQUIRIES.

A large number of correspondents ask us for formulæ which have already been published in this journal. It is not fair to such careful readers that we should frequently repeat such information, and so long as the back numbers containing the formulæ or replies required are in print we must decline to do so. Back numbers of our weekly issue can be obtained from the publisher at 4d. each.

Effervescing Saline.—July 9, 1887, page 56. (44/73. S. P.)

Books for the Minor Examination.—See page 93 in our issue of January 21. (48/56. *Apprentice*.)

Botanic Beer Essence.—On pages 29, 304, and 470 of our last volume will be found various formulæ for this. (57/33. A. R. R.)

Sponges, to Bleach.—See page 102 of last volume. (57/63. *Newcastle*.)

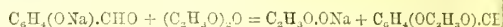
47/7. R. F. D.—Florist's Gum or Varnish.—Any white spirit varnish (such as common resin or sandarach in methylated spirit) is suitable for this purpose. The base of the petals should be touched with the varnish, or a drop of it may be placed in the centre of the flower.

47/2. *Scholastic*.—The following is a good formula for Blackboard Paint:—

Shellac	4 oz.
Ivory black	2 "
Emery, in fine powder	1 "
Ultramarine	1 "
Methylated spirit	1 quart

Mix and agitate occasionally until the shellac is dissolved.

47/9. *North Cotswold*.—(1) One part of Vanillin is said to be equal to 50 parts of vanilla. (2) Coumarin is made artificially by the action of acetic anhydride on sodium salicylate:—



The product is poured into water and boiled for a few minutes, whereby an oily fluid sinks to the bottom. The oil is distilled, and at a temperature of 290° C. a crystalline substance which is acetosalicylate minus one molecule of water is obtained. This body is identical in every respect with coumarin, and one part of it is equivalent to about 60 parts of Tonka bean. (2) It is not advisable to use crushed linseed for calf meal, as the amount of oil in it will not only render it liable to change, but it might prove rather strong a food for calves.

30/67. *Scruple*.—The mixture for allaying inflammation in lambing appears to consist of tincture of aconite and compound tincture of lavender with water. A five-minim dose of the former will suffice, sufficient lavender to colour the added.

E. M. D. has tried to make Easton's Syrup by the following formula:—

Liq. strychnine	3j.
Liq. ferri phosph. (pro syr. Fletcher's)	3j.
Quinine sulph.	64 grs.
Sacchari	6 oz.
Aq. destil., ad	3viij.

Dissolve the quinine in the liq. strych. and liq. ferri phosph., then add to the water. Mix, and make up, if necessary, to 3viij.

He finds that on keeping for some weeks the quinine is deposited [as phosphate]. That is to be expected, as the liquor ferri phosph. contains only the proper quantity of acid for syrup of phosphate of iron, but not for Easton's syrup. Additional phosphoric acid should be added to dissolve the quinine. It was pointed out in our last volume that Easton's syrup made by the ordinary formulæ and direct from ferrous phosphate sometimes becomes quite solid owing to the separation of quinine. All samples of quinine sulphate do not behave thus, probably because all do not contain the quinine, which is probably the cause of the separation.

In our reply to *Medicine* (44/14) last week regarding the medical preliminary examination, algebra should have been mentioned as one of the subjects to be passed.

Thymol Mercury is a rose-coloured heavy pulverulent substance having a pleasant thymol odour. It has been recommended for the cure of syphilitic ulcers and eczema, and is used as an ointment or as a dusting powder.

48/66. *Limonis* sends a sample of Lemonade Powder sold in his town at 6d. a packet (weighing about 1½ lb.). The directions are to add the powder to a syrup made by dissolving 2 lbs. of sugar in a quart of water. The powder is simply tartaric acid flavoured with oil of lemon.

50/32. M. X.—Soap Perfumes.—*Windsor*: Oil of camphor, 10 oz.; oil of bergamot, 5 oz.; oils of lavender and rosemary, 2½ oz. *Bouquet*: Oil of bergamot, 13 oz.; oil of neroli, 1½ oz.; oils of sassafras, cloves, and thyme, of each 1½ oz. *Marshallow*: Oils of lavender and verbenia, of each 10 oz.; oils of neroli and lemon, of each 2 oz.; oil of spirit

nt, 3 oz. The quantities given are for 100 lbs. of soap. We do not have a formula for the perfume of United Service soap.

212/10. *Medical*.—You will find full information regarding the Medical Preliminary Examination in articles recently published by us, particularly the editorial note in THE CHEMIST AND DRUGGIST, February 25, p. 253. You may see the subjects, mathematics (Euclid and algebra), elementary mechanics, and a modern language or science subject at the Durham University, and a certificate of having passed these, together with the pharmaceutical preliminary certificate, will entitle you to registration as a medical student. The Royal Colleges of Physicians and Surgeons in London and Edinburgh are not teaching bodies, and they accept evidence of study at any recognised school of medicine in the kingdom. The Durham College is one of these.

47/43. *T. Hood*.—Mounting is the most satisfactory way of Preserving Plants even for so short a period as two months, and it really takes less time and trouble than other methods. A new method of retaining the natural colours of flowers is recently been published. It consists of dusting salicylic acid upon the petals, and removing the powder with a brush when they are dry, or the acid may be in solution in spirit (p. 14). This is sprinkled over the blotting-paper in which the plants are pressed. The red colours are well retained by this method. With the use of salicylic acid it is not necessary to carry the drying process to the farthest limit, that if a little moisture be retained in the specimens, and they are not mounted, many of them may expand after a month or two on being placed in water.

48/29. *Ignoramus*.—In the "Art of Dispensing," which we have in the press and hope to publish in a short time, there is a chapter on Homœopathic Dispensing which will give you all necessary information.

48/19. *Minor*.—You will get some valuable information regarding Pharmacy in Australasia in letters in our last volume, page 93. North Queensland and Tasmania are there highly spoken of. Your best plan is to go to Sydney or Melbourne in the first instance. Good qualified men readily adapt themselves to situations there, and when they get experience of colonial life and trade, they are better able to take advantage of the openings elsewhere.

48/26. *F. H. Horniblow*.—Six grains of strychnine are sufficient for a 3d. packet of Vermin-killer. Mix with it from 20 to 30 grains of flour and just colour a pale blue with Prussian blue.

213/16. *T. M.*—We gave some account of the medical uses of the *Echinacea angustifolia* in our issue of July 16, 1882, page 74, to which please refer. The genus *Echinacea* is so called on account of the prickly scales of the receptacle giving it the appearance of a hedgehog (*echinus*). The plants are composite.

50/68. *Nucis Aræca*.—The dose of areca-nut for an adult is $\frac{1}{2}$ to $\frac{3}{4}$ oz. See additions to the British Pharmacopœia of 1867. (2) This correspondent sends us a cutting from the *New York Medical Journal* regarding the use of *Pinus Canadensis* as a cure for burns. The writer was called to treat a very severe burn in a child, and while waiting the return of a messenger from a druggist's with a mixture of lime-water, olive-oil, and carbolic acid [the latter, we may remark, has caused fatal results when applied to burns.—ED.], espied a bottle of pinus canadensis (colourless). Remembering its wonderful soothing influence in acute inflammation, he at once decided to try it. Taking the corner of a soft handkerchief, he rapidly painted the injured parts, when, like magic, the pain ceased. This surprised and delighted him, and he directed free applications to be made with a camel's-hair

brush, and the case had no more treatment, save a little iodoform ointment later on. What preparation is meant by colourless pinus canadensis?

47/14. *G. M. D.*—Kieselguhr, the diatomaceous earth used in the manufacture of dynamite, is the most satisfactory basis for Carbolic Powder. Lime is not suitable, as it is said to counteract the disinfecting properties of carbolic acid. Kaolin will suit in place of kieselguhr, but it is not so absorbing. Your best plan, in making say 56 lbs., is to spread a layer of the powder in a barrel or box, sprinkle with acid, then place another layer of powder upon that, then more acid, and so on. After a day mix well with a stick and repeat the mixing every day for a week, finally sifting through a coarse sieve.

47/30. *W. E. M.*—You will find a paper by Mr. T. Maben on medicated wines in our issue of March 17, page 371. This will give you hints as to how to make a Beef and Iron Wine. You should use ammonio-citrate of iron, Liebig's extract of meat, and a detannated sherry or port, preferably the latter. (2) The active ingredient of the ointment named is said to be mercuric oxide; but there is doubt about it.

48/45. *Eclectic*.—The use of escharotics for dressing the castration-wounds in live stock is a barbarous custom. The following formula is for a balsam which has been found to be a very efficacious healer, and it is a cleanly application:—

	Oz.
Elemi	5
Lard	4
Olive oil	2
Benzoin	$\frac{1}{2}$

Digest on a water-bath for an hour, then strain and add $\frac{1}{2}$ drachm of sandal-wood oil and 1 drachm of carbolic acid. As the elemi varies in consistency, alter the quantity of olive oil so as to make the resulting balsam as stiff as resin ointment.

49/23. *Carbolic*.—Find out, if possible, the nest of the Ants and well sprinkle the access to it with quicklime mixed with a little powdered camphor. The latter is reported to be abhorrent to the busy creatures; but paraffin oil is particularly obnoxious to them, and if you can sprinkle that in the cupboard they will soon disappear.

50/63. *Grandoly*.—Camphor julep is *aqua camphoræ*. For egg julep see page 30 of the current volume.

57/16. *J. W.*—It is not possible to make an amorphous substance like vaseline by mixing heavy mineral oil and hard paraffin, as the latter always exists in the mixture in a crystalline condition.

50/65. *Attraction*.—(1) Calcinated Soda is soda ash which contains a variable amount of real caustic soda, with carbonate, &c. One part of the soda to two or three of powdered quillaia will serve for a Hair-wash. (2) Liquid ammonia mixed with chalk or other plate powder is one of the best things for Cleaning Plated Goods. (3) For Cheap Bottling Wax take a pound of yellow resin and $1\frac{1}{2}$ oz. of boiled linseed oil; melt together, stir in 3 oz. of Armenian bole, and make into sticks. (4) You do not mention the nature of the Stains on Marble; but why not try Brooke's soap? (5) The efficacy of Insect-powder is not increased by the addition of flour.

57/12. *Jason*.—The Tissue for Wrapping Sweets is simply gelatine coloured with suitable agents, such as the aniline dyes. We cannot state the exact method of manufacture, but presume that it is much similar to the process of making paper into sheets—namely, spreading the solution of gelatine on an endless band, and passing through a calender.

57/39. *Saccharine*.—The following is the formula from the *Bristol Hospital Pharmacopæia* for *Syrupus Camphoræ Compositus* :—

Tincturæ camphoræ compositæ (sine oleo anisi)	3ij.
Oxymellis scillæ	5vj.
Syrupi opii	3j.

Misce.

Dose: One teaspoonful.

Syrup of opium is made by digesting 4 oz. of opium in a gallon of boiling water; filter when cold, and make up to 12 gallons with water, in which dissolve 1 cwt. of sugar.

57/50. *J. B. D.*—The paste used by dentists for destroying the nerve before stopping a tooth is a mixture of arsenic and morphine made into a paste with carbolic acid. Arsenic, 1 part; morphine hydrochlorate, 4 parts; and carbolic acid, q.s., are suitable proportions. About $\frac{1}{2}$ a grain of this is to be introduced into the carious tooth and kept *in situ* by means of cotton wool and a little mastic varnish, and allowed to remain for twelve hours or more until the desired effect is produced.

57/51. *Laurence*.—The book gives working formulæ for syrups, and will no doubt suit your customer. The authors, however, recommend their own essences; but that is perhaps natural under the circumstances.

48/36. *Cymro*.—The Solubility of Indiarubber is promoted by washing and grinding. Washing is performed in large tanks of water carefully heated so as to liquefy the rubber and allow earthy matters to subside. The rubber is then passed through rollers, and finally ground. In this condition it is fit for solution in any of the ordinary solvents, naphtha, shale spirit, or benzol. Solution may be effected in any suitable closed vessel which admits of agitation or stirring. The best qualities of indiarubber do not require to be washed—simply ground.

48/37. *R. Williams*.—Cures for Ringworm on the scalp are numerous, and all are more or less effectual. The first thing to do is to cut the hair and paint a ring round the circumference with solution of nitrate of silver (10 grains to 1 oz.). If the case is recent paint the spot with liquor epispasticus, which in most cases effects an immediate cure. But if not recent, paint the spot morning and evening with a solution of chrysarobin, 8 grains, in 1 oz. of chloroform.

49/25. *Winter*.—Preservation of Jellies.—Compounds of gelatine, sherry, &c., which are liable to become mouldy on the top by keeping should have a small proportion of salicylic acid added to them, say 5 grains to the pint; the glass jars must be thoroughly clean, dry, and quite hot from the oven when the jelly is poured in. Tie over with parchment as soon as possible after filling.

48/13. *C. S. A.*—Butter-powder as generally sold is bicarbonate of soda coloured with red bole.

72/29. *Scrutator*.—The following mixture for Eradicating Weeds may suit you:—Sulphur, 1 lb.; slaked lime, 1 lb.; water, 2 gallons. Mix. The mixture is to be poured upon the weeds, and it is said that it effectually destroys them.

48/35. *Iron*.—The Hardening of Iron depends greatly upon the quality of the metal and the degree to which it has been heated. If yellow prussiate of potash has not given sufficiently good results the following may be tried :—

Vitriol	$\frac{1}{2}$ pint
Saltpetre	2 oz.
Water	3 gallons

The iron to be at a cherry-red heat.

48/21. *W. Sharpe*.—The Writing-ink formula No. page 126 of our 1884 DIARY is not, strictly speaking, a logwood ink, as the basis is galls, the logwood being added to colour, just as indigo is in the case of blue-black ink. The formula is for one gallon. You will find two good formulae for logwood ink in our last volume, pages 333 and 582; the latter is the better. The following is a formula with which we have had good results :—

Extract of logwood	1 lb.
Lime water	15

Heat carefully—preferably over a water-bath—stirring until the extract is dissolved, then add a mixture of carbolic acid, 5 minims; crude hydrochloric acid, 30 minims; water, 1 oz.; continue the heating and stirring for half an hour, then set aside to deposit and cool; pour off the clear liquid and to it add, very gradually and with constant stirring, a solution of 8 lbs. of yellow chromate of potash in 2 oz. of water and 1 oz. of fresh milk with water to a pint.

Green-fly in Greenhouses.—If “D. T. E.” will try pyreth. ros. (insect powder) he will doubtless find it answer. I have tried it on plants, both in and out door. Well, just over the flies, and in the course of a few minutes the insects will drop off and die.—A. LAITRAM.

47/13. *Piccalilli* sends us samples of popularilet articles of which he would like to know the composition. The articles are, as a rule, not sold by chemists, but reach the users through the parcels-post. They are extensively advertised, and, we believe, much used. One of the articles is a *Cur-curling Fluid*, which is said to make straight and ungovernable hair curl immediately, by well rubbing the preparation into the roots of the hair. On examining this marvelous preparation, for which people pay 4s. 6d. and 7s. a bottle, carriage paid, we find it to be lime-water! The other preparation is a *Skin Tonic*, which, when applied freely with a handkerchief to the parts desired, and well pressed down, is reputed to improve the complexion, to impart a brilliant appearance to the skin, and to remove pimples, discolourings, and all imperfections of the skin. These benefits are obtained (?) by investing 7s. in a bottle of the stuff, which is a mixture of simple tincture of benzoin and water (the old-fashioned *lac virginialis*).

57/19. *Spero* is in trouble with a medical man who has seriously questioned the purity of his Lime-water, although it is made strictly according to the Pharmacopœia, with distilled water. On carefully examining a sample of the water which we have received, we find it to be free from chloride and sulphate, frequently present in lime-water, which has been made with unwashed slaked lime and tap-water, and the strength is .532 grain of calcium oxide (CaO) per ounce. The Pharmacopœia only asks for .5 grain per ounce, allowing a little decrease of strength by carbonisation on keeping. Obviously, the medical man has nothing to complain of.

40/69. *Pots*.—We cannot assist you in determining the composition of the china paint.

51/4. *C. B. H.* has not sent his name.

43/57. *Chlorodyne*.—We do not seem to have received the sample which you sent.

Information Wanted.

[Replies to the following requests are solicited by correspondents of THE CHEMIST AND DRUGGIST.]

28/15. What is the signification of the coloured capsules in chemists' windows?

47/45. Formula for Brompton Hospital asthma cure, similar to Himrod's.

47/69. What is rag-water; its origin, and how made?

48/34. Pure silicon for plate-powder; where obtained?



ESTABLISHED 1859,

PRINCIPAL OFFICE, 42 CANNON STREET, LONDON, E.C.

BRANCH OFFICE:

NORMANBY CHAMBERS, MELBOURNE.

Published every Saturday.

Subscription 10s. per year, payable in advance; dating from the commencement of any month.

Post free to every country in the world. Single copies, 4d. each.

Applied only to persons connected with the Trade

Australasian subscribers the subsidiary journal THE CHEMIST AND DRUGGIST OF AUSTRALASIA is included.

Literary Contents.

	PAGE		PAGE
At Counter	625	French Pharmaceutical News..	609
Australian Pharmaceutical Ex-		Gazette	614
aminations	615	Glasgow International Exhi-	
Bo of Trade Returns	630	tion	610
Col's Reports	618	Leaderettes	622
Conspicuous ..		Legal Reports	611
armacy Bill; Council Elec-		Metropolitan Reports.....	606
tion, 1888	631	New Companies	613
Chemistry Chair at		Obituary	625
Black Eyes; A Corner for		Parliamentary News	625
Students; Epsom Salts in		Personalities	614
read; Tincture of Myrrh		Pharmaceutical Society of Ire-	
and Borax	632	land	603
Dispensing Notes	633	Prescription Errors	615
al Queries	633	Provincial Reports.....	606
Cellaneous Inquiries	634	Scientific Notes	617
Editorial Notes:—		Some Druggists' Specialities ..	616
Pharmaceutical Council		Trade Marks Applied for	613
Section	620	Trade Notes	614
Free-trade Movement in		Trade Report:—	
America; Trade-marks and		London	626
their Registration	621	American Markets	629
Manufacture of Explo-		Chemicals in the North of En-	
sives	622	gland	630
res and Bankruptcy Re-		Notes on Various Chemicals ..	630
ports	611	Veterinary Treatment	616

ME THOUSANDS OF COPIES of the next issue of THE CHEMIST AND DRUGGIST will be sent as specimens to phar- mists in the United States and Canada. Manufacturers and dealers who have goods worth selling to those customers should take advantage of this opportunity. Application for specimens should be made at once.

THE ART OF DISPENSING.—It will be remembered that the numerous treatises which have been published in THE CHEMISTS' AND DRUGGISTS' DIARIES none have been more popular than those dealing with the art of dispensing. The earnestness with which those Diaries were bought satisfied us that there was a substantial demand for a work based on the lines of those treatises, and an unceasing series of applications for a reprint which we have ever since received added evidence of the want. We have decided to meet the general wish, and we are now getting ready for publication on a much extended, and generally a newly written, compendium, which will cover the art of dispensing with a completeness which we did not before attempt. The work will be unique in English literature, and will be one of the most valuable companions which the pharmacist can have. Fuller details will be published shortly.

THE MEDICINE-STAMP ACT.—We have also to announce the early publication of a work of very considerable interest and value. In view of the practical and constantly-recurring difficulties attendant on the interpretation of the Medicine-stamp Act, and with the desire of reducing these, Mr. E. N. B. of the Solicitor's Department of the Board of Inland

Revenue, has written for us a very complete and interesting history and exposition of the law affecting patent medicines. Mr. Alpe has for years been intimately connected with the administration of the Medicine-stamp Act, and he is in a position to explain, not only its inherent intricacies, but also to declare authoritatively the opinions held at Somerset House in reference to points of doubt. Both as a contribution to the history of the drug trade and as a legal manual this work will have a peculiar value.

POST-CARD COMPETITIONS, 1888.—No. 5.

As already announced, the competition for May is a test of the popularity of the various classes of goods sold by chemists.

Competitors are asked to send us post-cards during the month of May, on which they will state their selection to fill in the subjoined list:—

1. Most Popular Perfume.
2. " " Toilet Preparation.
3. " " Patent Medicine for internal use.
4. " " " " for external use.
5. " " B.P. Preparation (with doctors).
6. " " " (with the public).
7. " " Domestic Remedy.
8. " " New Remedy.

The post-cards need not repeat the words we have printed above; the number will suffice.

We shall count up the votes for the various articles quoted, and shall award the prize to the competitor who most nearly approaches the general decision.

Post-cards must be received before the end of May. Only subscribers and their *employés* are eligible to compete.

[We have been asked several questions in reference to this competition—whether, for example, under Nos. 7 and 8 proprietary articles are included. We do not desire to limit the judgment of competitors in any way, nor do we propose now to lay down any new rules. If the problem set is at all vague, it is equally vague for all, and will not affect the final decision.]

DIARY FOR NEXT WEEK.

Monday, May 14.

Society of Arts, John Street, Adelphi, London, W.C., at 8 P.M. Cantor Lectures. Mr. G. Aitchison on "Decoration"—Lecture III.

Tuesday, May 15.

Royal Institution, at 3 P.M. Mr. Walter Gardiner, M.A., on "The Plant in the War of Nature."

Society of Arts, John Street, Adelphi, London, W.C., at 8 P.M. Foreign and Colonial Section. Mr. James Rankin, M.P., on "Duty of the State towards Emigration."

Pharmaceutical Society of Great Britain. Conversazione and formal opening of new Examination Hall, 17 Bloomsbury Square, at 8 P.M.

Wednesday, May 16.

Pharmaceutical Society of Great Britain, 17 Bloomsbury Square, W.C. Annual Meeting at 11 A.M. for 12 o'clock noon. Dinner of the Members and Associates in the Freemasons' Tavern at 6.30.

Society of Arts, John Street, Adelphi, London, W.C., at 8 P.M. Ordinary Meeting. Mr. R. E. B. Crompton on "Electric Lighting from Central Stations."

Thursday, May 17.

Royal Institution, at 3 P.M. Professor Dewar, M.A., on "The Chemical Arts."

Friday, May 18.

Royal Institution, at 9 P.M. M. Alphonse Renard, LL.D., Curator of the Royal Museum, Brussels, on "La reproduction artificielle des roches volcaniques." (In French.)

Metropolitan Reports.

ROYAL INSTITUTION.—At a meeting held on Monday Dr. Tyndall was elected Honorary Professor, and Lord Rayleigh Professor of Natural Philosophy, in succession to Dr. Tyndall.

THE PROPOSED TEACHING UNIVERSITY FOR LONDON.—A Royal Commission has been appointed "to inquire whether any, and what kind, of new University or powers is, or are, required for the advancement of higher education in London." The members of the Commission are the Earl of Selborne, ex-Lord Chancellor, the Hon. G. C. Brodrick, Sir James Hannen, Sir William Thomson (Glasgow), Prof. Stokes, P.R.S., and the Rev. J. C. Welland, Headmaster of Harrow. Mr. J. L. Goddard is secretary of the Commission.

SOCIETY OF CHEMICAL INDUSTRY.—Mr. Ludwig Mond has been nominated to the office of president, in succession to Professor Jas. Dewar, F.R.S., who, after the annual meeting, becomes a vice-president. Sir I. Lowthian Bell, F.R.S., Mr. R. Forbes Carpenter, and Dr. John Evans, F.R.S., have also been nominated vice-presidents under rule 8; and Mr. B. E. R. Newlands and Mr. Alexander M. Chance have been nominated Ordinary Members of Council in place of Mr. R. Forbes Carpenter and Dr. John Evans, F.R.S., who are to be vice-presidents.

THE LARGEST CHLOROFORM-TAKER IN THE WORLD was Louisa Mary Blake (42), a midwife lately residing at 13 New North Street, Theobald's Road, Holborn. She had died from an overdose, and an inquest was held before Dr. Danford Thomas on Monday. Her daughter said deceased had been ailing for some months past from bronchitis. She had been in the habit for years of inhaling very large quantities of chloroform, it being her practice to pour the chloroform on the bedclothes, get into bed, and pull the clothes up to her nostrils. During Thursday she went out four or five times, returning each time with chloroform, which she took. Witness went into the bedroom in the afternoon and noticed that the deceased was black in the face and appeared as if in a fit, on which she summoned assistance. The Coroner said that the deceased, he knew, was in the habit of taking large quantities of chloroform, for she had told him herself that she did so when she had appeared before him at inquests, and he had cautioned her against it. Dr. Robert Gould, of Lamb's Conduit Street, Holborn, deposed that he had known the deceased for the last ten years, and knew that she took large quantities of chloroform all that time. She was the largest chloroform-taker in the world, for she would take a pint of chloroform in a day. He had cautioned chemists against supplying the deceased with chloroform. On Thursday afternoon he was called to the deceased and found her in bed quite dead, and in the bed he found an ounce bottle that had contained chloroform. Death was from syncope of the heart, caused by an overdose of chloroform. The jury returned a verdict of "Death from misadventure."

Provincial Reports.

Items of news, and newspapers containing matters of interest to the trade, sent to the Editor, will much oblige.

BIRMINGHAM.

DENTISTRY.—Amongst the lectures to be delivered during the summer session at the Queen's College are three on dentistry, one by Mr. Charles Sims, L.D.S. London, on "Dental Surgery"; a second by Mr. William Elliott, L.D.S. Edinburgh, on "Dental Mechanics"; and a third by Mr. John Humphreys, L.D.S.I., on "Dental Anatomy."

VERMIN-KILLER AGAIN.—Two fresh cases of poisoning with vermin-killer have been added to the already long list of persons who have committed suicide, or attempted to commit suicide, through taking this poison in Birmingham and the neighbourhood. On Friday of last week Fanny

Cook (19), of Victoria Terrace, Park Road, Aston, took a pennyworth of the powder, and on Saturday, Eliza Perry, a married woman, of Great Hampton Row, followed her example. Both the women were taken to the hospital, but in neither instance did the dose prove fatal.

PROPRIETARY SOAPS.—At the annual meeting of the Birmingham Grocers' Protection and Benevolent Association, held at the Grocery Exchange, on Wednesday, under the presidency of Mr. Shelley, a report was presented stating that the past year had been one of more than usual activity in consequence of the Margarine Act becoming law. Reference was also made to the ruinous "cutting" in proprietary soaps, and it was urged that only by prompt and combined action on the part of the members could the evil be removed. Many of these soaps are sold by chemists in the town.

BURY.

EXTENSIVE UNPAID ADVERTISING.—Last week a young man named Charles Halstead, of Tunstill House, Mowbray, near Rochdale, was charged before the Bury magistrat with long-firm practices. From the evidence of two one-witnesses, hailing from London, Birmingham, Manchester, Leeds, Bradford, &c., it appeared that in October 1897 the defendant and a man who went under the name of G. H. Mandeville engaged a shop in Union Square, Bury, which, however, was not occupied. Orders were sent to L. S. Davis, printers, St. Mary Axe, London, purporting to come from Mandeville & Co., for 50,000 copies of a copyright design pamphlet to advertise "Halstead's renowned empyreal ointment." The value of the order was over 200*l.* On applying for references the Messrs. Davis were referred to Messrs. Thomas Halstead & Sons, chemical manufacturers, Mowbray, from whom the firm of Mandeville & Co. was said to have purchased the right of making the ointment. From the British Enamel Iron Company, Birmingham, 1,000 plates with the words, "Use Halstead's Ointment, the best in the world," were ordered, goods to the value of 61*l.* 5*s.* being forwarded on similar references. The rest of the order was in case of process when suspicions were aroused and the Birmingham police communicated with. The firm of Petty & Co., printers, received an order for 1,000,000 handbills, 432,000 of which were delivered. Messrs. Kronheim, printers, of Manchester and London, received an order for 1,000,000 leaflets and 1,000 show cards, of a value of 458*l.*; while Mr. A. Cooke, printer, of Leeds, had an order given for 10,000 posters. Other orders were given, and on the strength of Messrs. Halstead's recommendation they were executed, none being paid for. The bench committed the defendant for trial at the next Salford Sessions, and allowed bail, defendant in 100*l.* and two sureties of 50*l.* each.

CAMBRIDGE.

FATAL DOSE OF MORPHIA.—An inquest has been held by the borough coroner concerning the death of Mary Ann wife of Thomas Henry Maile, landlord of the "Duke of Gloucester," whose age was 51 years. According to Mr. Maile's evidence the deceased had suffered from violent pains in the side, and Dr. Greer was called in. He remained with her all night, and as she was getting worse, Dr. Latham, professor of medicine in the University, was called in to his assistance. Dr. Thomas Greer, who affirmed, stated in evidence that Mrs. Maile's complaint was peritonitis. He sent her two small pills, each containing two quarters of a grain of morphia, and directed one to be taken at once, and another in four hours' time if the pain continued. He had administered morphia to the deceased on a previous occasion in about the same quantity. They were pills he kept in store, and he believed they were obtained either from Burgess, Willows & Co., or from Burgoyne, Burbidges & Co. They were both well-known firms of wholesale druggists, and the pills were ordered on behalf of the Cambridge Friendly Societies' Medical Association. He saw the deceased later on, but she was no better, and he ordered hot fomentations. Two hours later, and the impression that only one pill had been taken, he injected five minims of solution of morphia under the skin of the abdomen, over the seat of the pain. Three hours after this she became comatose, and he had to call in Professor Latham, who now

he found the deceased suffering from many of the usual symptoms of narcotic poison. The jury returned a verdict to the effect that the deceased died through misadventure, by an overdose of morphia.

DUNSTABLE.

WINTER IS COMING.—Mr. J. H. Herington has opened a new chemist's shop at 16 High Street South, and the other day the sun spied the window, and threw his rays with wonton profligacy thereon, the result being that one of the showcase bottles acted as a burning-glass, and set fire to the enclosure. The fire was, however, discovered before much damage was done, and means were taken to ensure that a recurrence of this too warm attention will not have such a result.

DURHAM.

DESTRUCTIVE VERMIN-KILLER.—A disastrous explosion occurred at Bowes House Farm, near Fence Houses, last week. Mr. Nesbitt, veterinary surgeon, and Mr. Miller, farm labourer, employed on Earl Durham's estate, were engaged in destroying rats in some outbuildings, and were using a mixture which is freely advertised as a destructive agent in many of the agricultural papers. A packet of the preparation had been placed in a rat-hole, and in order to create fumes Mr. Nesbitt placed a red-hot poker on the mixture. Immediately an explosion took place, seriously injuring and blinding Mr. Nesbitt, Mr. Miller being less seriously hurt. The building was shattered.

LEEDS.

MEDICAL MAN SENTENCED TO DEATH.—At Yorkshire Assizes, held in Leeds on Saturday, Mr. Justice Mathew on the bench, William Henry Emeris Burke (42), M.R.C.S.E., was found guilty of the wilful murder of Aileen Ethel Oona Lke, his daughter, at Monk Bretton, near Barnsley, on February 4, 1888. Drink was at the bottom of Dr. Burke's trouble, and in passing sentence the Judge said to the prisoner, "You are a man of high education and great intelligence, reduced for the time by drinking to the level of the lowest and most worthless of human creatures." The prisoner felt his position keenly, and in the course of the trial evinced great sorrow regarding his crime, having been much attached to his daughter.

MAIDSTONE.

CHEMIST AND DOCTOR.—At the County Court on May 4, Albert Anning, chemist, of Week Street, Maidstone, sued Charles Crowhurst, surgeon, of Maidstone, for 16*l.* 17*s.* 2*d.* drugs supplied. The plaintiff came to Maidstone in 1885 and entered into partnership with Mr. Ridley, chemist, on January 1, 1886. That partnership went on until February 19, 1887, when Mr. Ridley became bankrupt. The plaintiff then took over the business and purchased Mr. Ridley's debts from the trustees in the bankruptcy. Amongst those debts was the one in question. Defendant contended that as there had been bankruptcy proceedings the plaintiff could not sue alone for the money claimed, and put in a counterclaim for 16*l.* 6*s.* At the judge's suggestion the case was adjourned for a written statement to be put in.

NEWPORT (MON.).

GROCERS v. CHEMISTS.—For a long time there has been a rivalry between the grocers and chemists here on the patent medicine question. Price-list after price-list has been issued, and prices have been brought down to cost and even lower. The last announcement issued by the Supply Stores is thus:—"Please take notice. Almost all patent medicines quoted in this list are reduced more or less this month; prices are now so low that it is absolutely impossible for a patent medicine vendor in the United Kingdom to sell cheaper. Do not buy of those who only profess to sell at store prices, as you will find to your disgust when comparing that they charge considerably more. Compare! Compare!"

PLYMOUTH.

A GOOD START.—Mr. Roscoe C. Spurin has opened business as a chemist and druggist in Tavistock Road, Plymouth. Mr. Spurin has been dispenser for the Plymouth postal and telegraph staffs for thirteen years, and in celebration of his new start the staffs gave him a concert to wish him success, and presented him with a handsome dial clock for his new establishment, suitably inscribed.

SEATON CAREW.

A NEW SULPHUR SPRING.—The boring operations which have been going on for several months at Seaton Carew have led to the discovery of a sulphur spring not unlike the spa at Harrogate. The boring, which was first designed for salt and now for coal, has already reached a depth of about 1,300 feet, but it is believed that the real source of the spring is above this point. The sulphurous water is to be the subject of analysis, and until the result of that has been received little idea can be had of the value of the discovery.

SHEFFIELD.

TRADE-MARK OFFERED FOR SALE.—Messrs. Nicholson, Greaves & Barber put up for sale at their mart on Tuesday the trade-mark for Hughes' Original Powders, together with the stock of powders, the secret for making them, printing blocks, &c. Bidding was slow, and the lot was withdrawn at 10*l.*

STONE.

STRANGE ANALYTICAL RESULTS.—Henry Stephens, provision dealer, Radford Street, was summoned last week under the Sale of Food and Drugs Act for selling lard which Mr. Edmund W. T. Jones, public analyst for Staffordshire, certified to contain 2.44 per cent. of water but no other foreign ingredient. Genuine lard should contain no appreciable quantity of water. For the defence it was submitted that the lard was "Kilvert's pure lard, finest English refined, warranted free from adulteration." Amongst the witnesses called was Charles Hawley, foreman at Messrs. Kilvert's lard refineries, who described the process of refining the lard, and stated that he had tested the sample and found it practically pure. Mr. Nicholas Kilvert, a member of the firm, also deposed that from the practical test which the last witness applied the percentage of water was under 1 per cent. Mr. Ascott, analyst for the city of Manchester, stated that the sample he examined contained only 1.07 per cent. of water, and Mr. J. Carter Bell, analyst for the borough of Salford, testified that the percentage in the sample he analysed was only one-half. The magistrates in consequence of the conflicting evidence acceded to the request of Messrs. Kilvert's solicitor to forward the reserved sample to Somerset House, and the case was adjourned *sine die*.

SCOTLAND.

EDINBURGH.

FIRE IN CHEMICAL WORKS AT LEITH.—In the premises of Messrs. J. & J. Cunningham, chemical manufacturers, Salamander Street, Leith, last week, a quantity of nitrate of soda, which was lying on the floor, in some way or other caught fire; but the flames were extinguished before getting time to spread. The Leith fire brigade were on the spot. Their services, however, were not required.

THE ROYAL SOCIETY.—At a meeting of this society on Monday, a paper on the secretion of carbonate of lime by animals, by Mr. Robert Irvine and Dr. G. Sims Woodhead, was read. In the course of the investigation a hen had been taken for the purposes of observation, and it was found that sulphate of lime could be converted into the carbonate of lime which forms the egg-shell. The processes of secretion of carbonate of lime from the lime sulphate by digestion were also described. Another paper on the solubility of carbonate of lime under different forms in sea water, by Mr. Robert Irvine and Mr. George Young, was also read.

DR. RALPH STOCKMAN, assistant to the professor of materia medica in the University, has been appointed

Research Scholar of the British Medical Association. The scholarship is of the annual value of 150*l.*, and is tenable for several years. Dr. Stockman is well known to frequenters of the evening meetings of the North British Branch. To these meetings he has on several occasions contributed valuable papers. In addition to his training in Professor Fraser's laboratory, he has studied in the laboratories of Professors Schmiedeberg and Hoppe-Seyler. He proposes to continue or initiate researches on the following subjects:—1. The chemical changes which menthol, camphor, and similar bodies undergo after absorption; how far these metabolic products affect the organism, and whether they still act as antiseptics. 2. The exact mode of action of the camphor group on the heart and circulation. 3. The pharmacology of a new body which acts like digitalis. 4. The problems connected with the absorption and excretion of glycerine and of fats. 5. On the connection between chemical constitution and physiological action of some alcohols. In connection with the first of these subjects, he has already observed that after large doses of camphor a considerable quantity of grape sugar is found in the urine. The drug appears to cause a species of artificial diabetes, so to speak. The newly appointed scholar gained the University gold medal in 1886 for his thesis when he took his M.D. degree.

THE SUNDAY SALE OF METHYLATED SPIRITS.—At the meeting of the Edinburgh Town Council on Monday, a representation by the Chief Constable as to the sale of methylated spirits in the city on Sundays was read and referred to a committee. The representation was in these terms:—

"I think it my duty to bring prominently under the notice of the Magistrates and Council the fact that on Sundays within the city a considerable trade has arisen among certain druggists for the sale of methylated spirit to persons who consume it as a beverage. In consequence of numerous complaints I have had observation kept upon the shops of a number of druggists who were reputed to carry on this Sunday trade, and the result of that observation shows clearly that a very considerable traffic goes on every Sunday. The class of persons who purchase the spirit is about the lowest we have in the city, and their appearance ought to be sufficient to denote to the druggist the purpose for which they are making their purchases. No questions, however, are asked as to what the methylated spirit is wanted for, and in not a few cases the purchaser did not even require to ask for any specific article, but simply placed an empty bottle on the counter with the price of the quantity wanted, and it was at once supplied. The whole facts go to show that the druggists are perfectly well aware that the spirit is bought to be drunk, but without specific evidence to prove this knowledge on his part there is little hope of securing a conviction for a contravention of the Act. The spirit is known amongst its users by a variety of names, among which are 'finish,' 'dynamite,' 'polish,' &c. The trade is an increasing one, and I am certain it is doing a vast amount of mischief; but as the law stands the police are powerless to deal with it. I have never been able to find any objection which should hold good to the prohibition of the sale of methylated spirit on Sundays, and if the Corporation can see their way to make any representation likely to effect this they would do a public service."

Mr. Ritchie thought the Council and the community were very much indebted to the Chief Constable for taking up this matter. While the committals made during April last numbered 458, as against 566 for April 1887 (this showing a decrease of 108), the committals made on the five Sundays of last month numbered fourteen as compared with only five for the four Sundays of April 1887. That showed that some system was going on which ought to be stopped. This sale of methylated spirits on Sundays was one of the most deplorable things that ever happened in Edinburgh.

Mr. J. Miller Dunlop said he knew one druggist's shop which drew 30*s.* in two hours of a Sunday morning by the sale of methylated spirits.

Mr. William Gilmour, in a letter to the *Scotsman*, says, "The evil is to be deplored, whether considered in the degrading nature of the traffic or the maddening effect of the vile compound on the unhappy wretches who resort to it. I believe there is only one remedy—namely, to prohibit its sale on the Sunday—and I write mainly to certify that such a prohibition would entail hardship on no one."

I don't know if the case of 30*s.* worth sold in two hours on a Sunday morning be genuine, or only a stock story revealed for the occasion, but as Councillor J. Miller Dunlop says he knows the druggist, all I have to say is that his bounden duty is to send his information to the Excise authorities, who have the power, and who will on his information undoubtedly deal with the case. It is difficult, no doubt, for the Excise to deal with small quantities sold for drinking purpose, but when 30*s.* worth (which, at the present retail price of methylated spirits, means between 30 and 40 quart bottles) is sold in two hours, there should be no difficulty in getting a conviction, especially if the Councillor gives his help."

Pharmaceutical Society of Ireland

THE monthly meeting of the Council was held on Wednesday, May 2. Present—The President, Mr. James E. Brunker, M.A., in the chair; Messrs. Doran, McCormick, Beggs, Grindley, Allen, Wells, Dr. Collins, Dr. Montgomery, and Professor Tichborne.

THE PRELIMINARY EXAMINATION AND THE MEDICAL PRELIMINARIES.

The PRESIDENT said a communication had been received from Mr. E. M. Hill, a licentiate of the Society, suggesting that the Council of the Society should request the General Medical Council to accept, *pro tanto*, its Preliminary examinations. The General Medical Council had already known that step as regarded the Pharmaceutical Society of Great Britain. They had before them that day a letter from the Privy Council, sanctioning their new curriculum for the preliminary examination; and he (the President) thought that the time was opportune, and there could be no possible objection to the Council making the application which Mr. Hill suggested.

Dr. MONTGOMERY: It is a question for the General Medical Council to consider.

The PRESIDENT: We can send forward the curriculum of our Preliminary examination; if it falls short in anything, of course the General Medical Council will require the candidates to pass in the additional subjects.

Dr. MONTGOMERY asked had the Preliminary examinations of the English Pharmaceutical Society been recognised by any of the English medical bodies.

The PRESIDENT said Mr. Hills's correspondence included a letter from the Apothecaries' Society of London, stating that they would accept, *pro tanto*, the Preliminary examination certificates of the English Pharmaceutical Society on their being accepted by the General Medical Council.

On the motion of Mr. BEGGS, seconded by Mr. MCCORMICK, it was resolved that the General Medical Council be requested to accept, *pro tanto*, the Preliminary examination certificates of the Society.

THE PRELIMINARY EXAMINATION.

A letter from Sir William Kaye, Q.C., clerk of the Privy Council, transmitted a copy of an Order in Council of April 18, approving of the additional regulations made by the Council of the Society with respect to the Preliminary examination.

The PRESIDENT said these regulations would come into force at next examination.

The new features of the examination are that English grammar will include "orthography and parsing," and that a syllabus of the examination in the rudiments of botany, chemistry, and physics is added. The botanical section extends only to the morphology of the plant; chemistry and physics is to cover the following:—

General Properties of Matter:—Principal characteristics of solids, liquids, and gases.

Weight and Measure:—Relations between, both in the British and the metric system.

Specific Gravity:—Definition of—commonly known modes of obtaining in solids and liquids.

Temperature:—Effects of change of—on gases, and generally on solutions of solids.

Thermometer:—Conversion of F. scale into C. scale, and *vice versa*—theory of construction of.

Atmospheric Pressure :—Boyle's law—barometer—principle of construction of mercurial—relation of columns of various fluids which might be used—aneroid.

Elements and Compounds :—Into what broad classes subdivided—examples—general properties, sources, and mode of preparation of N, C, P, Hg, Fe, Pb, Cu, S, O, H, K, Na, I, Br, and Cl.—conditions under which chemical combination occurs—Distinction between chemical and physical change—combustion—examples—combination by weight—law of multiple proportions—atomic theory—atoms—molecules—atomic weight—valency—law of Avogadro—alkalis—acids—salts—symbols—formule—equations—exercises.

Allotropism, Isomerism :—Examples.

Atmosphere :—Physical and chemical constitution—impurities—how affected by respiration of animals, action of plants, and by combustion.

Water :—Composition of—synthesis—varieties of—impurities.

RECOGNISING THE CERTIFICATES.

A letter was read from Messrs. Wills and Wootton asking the Council to recognise the certificates of the Westminster College of Chemistry and Pharmacy.

The REGISTRAR mentioned that an application to the same effect was made by that college a year ago.

Professor TICHBORNE: What reply was given then?

The PRESIDENT: We had no power to recognise them then.

Dr. MONTGOMERY asked what kind of education was given in the college.

The PRESIDENT said it was well known as a very good school.

Professor TICHBORNE suggested that some one should pay a visit to the college and report to the Council before they acceded to the application.

On the motion of Dr. MONTGOMERY, seconded by Mr. WELLS, it was resolved that the consideration of the application of Messrs. Wills and Wootton be postponed for a month to enable the Council to make inquiries relative to the college.

THE PHARMACY ACT AMENDMENT BILL.

A letter was read from Messrs. Casey & Clay, enclosing another from Messrs. Clay & Close, of London, in reference to the Pharmacy Act (1875) Amendment Bill. The letter of Messrs. Clay & Close stated that they had had a long interview with the Earl of Milltown, who had expressed himself satisfied with the alterations made in the Bill, and had agreed to take charge of it subject to his receiving information on two points. He wished to know what was the answer of the Council to a printed statement a copy of which he enclosed; and he also desired to know whether the title "registered druggist" in the Bill could be altered to "registered chemist and druggist"?

The PRESIDENT said the printed statement enclosed in Messrs. Clay & Close's letter was first published some time ago, but had been lately circulated amongst the members of the House of Lords. Its statements were so entirely inconsistent with the existing state of the law in Ireland that at first it did not appear to be worth replying to; but in consequence of the step which had been taken by those who issued it, of circulating it in the House of Lords, he (the President), after conference with the Vice-President, Mr. Draper, had taken upon himself to draw up a reply, which he had had printed, and a copy of which he had already forwarded to Lord Milltown. [This reply was referred to last week.] It now lay on the table for inspection by the members of the Council. Lord Milltown was anxious that the title "registered chemist and druggist" should be substituted for that of "registered druggist." There were two objections to that. The first was that the title "chemist and druggist" was earmarked by the Act of 1875. It would be quite within the power of a future Council, if they should wish to do so, under the 15th section, to adopt a second (that is a higher) grade of dispensing chemists, should the circumstances of the country require it. It would be therefore unwise to abandon voluntarily any powers that the Council at present possessed. Another objection was that the great majority of those proposed to be registered would not be chemists in any accepted sense of the term, which implies a person having a competent knowledge of scientific and systematic chemistry. Therefore to give them the title of "chemist" in the Bill would be misleading. The replies given to his lordship appeared to have satisfied him, for in a letter which he (the President) received from him on April 28

he said that he had written to Messrs. Clay & Close to say that he should be prepared to introduce the Bill at once. He added that he was quite satisfied with his (the President's) letter of April 23. The question for the Council now was—what was the next step they were to take? The Bill would probably pass quietly through the House of Lords; but he thought it would be advisable, as soon as the Bill should be printed, to ascertain what the Government would do. The present Lord Chancellor of Ireland appeared to take an interest in the matter when he was addressed on it before; perhaps it would be well to send him a copy of the Bill and of the printed statement now before them, and ask him to receive a deputation from the Council. It would be very important if they could get the Government to show some interest in the Bill in the House of Lords.

Dr. MONTGOMERY remarked that the Bill would hardly get into the House of Commons before Whitsuntide.

Mr. GRINDLEY said the President's printed statement ought to be sent to members of the House of Commons.

The PRESIDENT said he would have that done.

On the motion of Mr. ALLEN, seconded by Dr. COLLINS, it was resolved that the President's reply to the statement put forth by the North of Ireland Chemists' Association be adopted by the Council.

The PRESIDENT remarked that one of the provisions of their Amendment Bill was that every establishment for compounding prescriptions or sale of poisons that was not under the actual control of its proprietor should have a qualified person present in and conducting it, whether he was a *medical man*, apothecary, pharmaceutical chemist, or druggist. The medical man keeping open shop appeared to have been omitted from the English Amendment Bill. One of the greatest difficulties the Society had to encounter arose from medical men lending their names to establishments situated perhaps twenty or thirty miles away from them, and conducted by unqualified persons.

A report was received from the examiners relative to the April examinations.

Some other business having been disposed of the Council adjourned.

FRENCH PHARMACEUTICAL NEWS.

(From our Paris Correspondent.)

NEW ANTIMONY MINES have been discovered near Brioude and Soulagès (Cantal) in Auvergne. Jean Pignol, a school-master of the neighbourhood, registered the claim in question, and served due notice, as law directs, on the owner of the land, previous to working the lodes.

HOSPITALS SELLING MEDICINES.—The Saint-Etienne hospital is being sued by the pharmaceutical syndicate of the department, backed by the French Pharmaceutical Association, for selling medicaments to the public. Saint-Etienne is an important manufacturing town in the neighbourhood of Lyons, and its hospital and asylum very recently received a very generous bequest, which renders such unlawful addition to its income quite unnecessary. The pharmacists intend to carry the case to the last jurisdiction if requisite.

GOING TO THE PHARMACIST.—Sophie Delen, 15 years of age, has been sentenced to a reformatory institution till she comes of age, for poisoning two infants entrusted to her care. The girl was employed in a family near Lisle, to attend on twins aged 4½ months. One of the babies died, and the other barely recovered after repeated fits of sickness which proved to have been caused by the administration of phosphorus. Sophie admitted she had given the infants matches to suck, but offered the excuse that she only wanted to make them sick so as to be sent to the pharmacist's in town for medicines, and take a little airing at the same time.

THE BORDEAUX FACULTY OF MEDICINE AND PHARMACY. The new building was inaugurated by President Carnot during his recent excursion in the south-western departments. It is reported to have cost four million francs, part of the sum having been granted by the city, and another portion being derived from the Godard legacy. All the appointments and appliances of the faculty are said to be of the most approved and modern description. During the present term 505 medical and 218 pharmaceutical students are

attending the lectures, which cause the Bordeaux faculty to rank, so far as numbers are concerned, next to Lyons, that is, the third in France. On the occasion the President, among other decorations, appointed Dr. Pitres, the president of the faculty, a knight of the Legion of Honour, and Professor P. Carles, pharmacist *agrégé*, an officer.

LYONS PHARMACISTS APPEAL TO THEIR ARCHBISHOP. Religious communities in the Rhone department seem to greatly interfere with the business and profit of pharmacists by unlawfully dealing in drugs and medicaments. Before beginning actions at law against them, the secretary of the Pharmacists' Syndicate thought he would first appeal to his Grace, their superior, and ask for his wise intervention. A very respectful letter was, therefore, addressed, reciting the grievances of the pharmaceutical body, and the unlawful action of various convents and communities in the diocese, recalling judicial decisions already rendered in similar cases, and finally requesting the Archbishop to interpose before the pharmacists apply to the courts. The step taken by the Lyons people is novel, but so far no answer has been received to the address.

SUPPRESSION OF THE STRASBOURG MEDICAL SOCIETY.—The German authorities, on April 30, officially notified the officers of the society that in pursuance of an order of the Department's President the society had been dissolved, and forbidden to meet again, under the penalties by law provided, namely, from two months' to one year's imprisonment, and 50f. to 1,000f. fine, against each and every delinquent. The reasons for the suppression are unknown, or at least not stated. The society was formed in 1842, and was composed of doctors of medicine, pharmacists of the first class, and veterinary surgeons practising in Strasbourg and the old department of the Bas-Rhin. Among its pharmacist members it numbered such well-known names as MM. Fahlmer, Heidenreich, Jauneson, Reeb; Professors Kirschleger, Oberlin, Schützemberger, and others. In 1845 the society added to its features a benevolent fund and association for the benefit of old and infirm members. Politics were rigidly excluded, and the German Government never showed by word or sign that the society had incurred its displeasure.

EXHIBITION MEDALS WRONGLY USED.—X—, a well-known manufacturer of chemicals, was recently prosecuted by Y—, a rival, for unduly representing exhibition medals on bills and business cards. At first facsimiles of the medals were printed with the simple mention, "Paris, 1878-79." Afterwards the bills and cards only bore the medals without date or indication of any sort, so that Y— charges that X— wilfully omitted all mention of date or cause of award to make the public believe the medals had been obtained for chemicals exhibited. On the contrary, the rewards had been conferred, one in 1878 (a mention) for perfumery, and the other (a bronze medal) in 1879 for a tooth-wash. Therefore Y— prayed for the application of the law of 1886 against such frauds, the facts having taken place since then, and also claimed damages for injury done to his business through unfair practices. The Paris Court of Appeals sentenced X— in 25f. fine and costs. As to Y— the Court averred he had sustained no damage worth speaking of, and merely granted him 6 38f.—just 5s.—the nominal cost of the application. The sums mentioned are ridiculously small, but the true expenses are only known to the parties to the suit. The worst of all is that poor X— will have to suppress the medal cuts that looked so nice on his billheads and business cards.

MESSRS. WILLIAM T. COLEMAN & CO., of San Francisco, the largest commission merchants west of the Mississippi, failed a few days ago for \$20,000,000, owing, it is said, to shrinking in the value of \$2,000,000 worth of borax which they had on hand, and of which article they were the largest holders in the United States. The senior member was a Californian pioneer in 1849, and was widely known as the head of the celebrated Vigilance Committee which, in the early days of that State, exercised a kind of rough judicial function in California by lynch law. Mr. Coleman has been recently mentioned as a Democratic candidate for the Presidency. It is said that the firm will pay their liabilities in full if given time to advantageously dispose of their assets.

INTERNATIONAL EXHIBITION, GLASGOW.

THIS exhibition was opened on Tuesday by the Princess of Wales. The weather was charming, a light breeze keeping the atmosphere even of Kelvingrove Park clear, while the bright sunshine showed off to the best advantage all the pomp and circumstance attendant on the presence of royalty. So far as space is concerned, the Glasgow Exhibition is the largest that has been held in the United Kingdom since the London International Exhibition of 1872. The ground occupied by the principal building and its auxiliaries is almost ten acres. The generally finished site of the exhibition reflected credit alike on the exhibitors and the management.

Generally the exhibition promises to be a great success. The machinery section is very attractive. The picture galleries contain a very unusual collection of high-class paintings. Several systems of improved lighting by gas and oil are at work in different parts of the grounds and buildings, and some useful information may be picked up in regard to an effective and economical illuminant. To those who understand them the systems of electric lighting will add matter of much interest.

We confess, however, to some disappointment in regard to the pharmaceutical display. We could only discover three pharmaceutical firms who are exhibitors, viz., Messrs. Fraser & Green, and the Glasgow Apothecaries' Company, Glasgow; and Messrs. John Mackay & Co., Edinburgh. These, moreover, fight shy of physic. Messrs. Fraser & Green have a very pretty and well-arranged case devoted to their special sets—lavender water, fragrant essence, and "British" eau de Cologne—aerated waters, and a few specimens of drug in the raw state. If we might offer a suggestion in regard to this case, it would be that the harmony of the exhibit would be improved by the raw materials shown being all such as are used in perfumery. Gum arabic and chamomiles, for example, although intrinsically fine specimens, look a little out of place surrounded with fragrant essence and lavender water, and alongside dried rose-leaves, dried lavender, and suchlike.

The Glasgow Apothecaries' Company have a case devoted entirely to perfumery. Specimens of otto, musk, essential oils, flower pomades, and other materials used in the manufacture of perfumes, are shown in conjunction with the completed scents. A large show jar of ess. bouquet had, it is said, before we saw the case, fallen down and got smashed. A quart or so of the fragrant liquid was trickling from the neck to the floor, attracting fair owners of handkerchiefs to the spot, doing the exhibitors a good turn by mopping the spot off their finely polished case.

Messrs. John Mackay & Co. have in the food section a neat and tastefully-arranged case of their well-known culinary preparations, such as refined gelatine, flavouring essences, calves'-feet jelly for invalids, and essence of rennet.

If weak in pharmaceuticals, the Exhibition is strong in chemicals. Some of the specimens are magnificent, and a brief description would do justice to them. We shall only notice a few of the most striking.

Messrs. J. & J. White, Glasgow, have some wonderful specimens of chromate and bichromate of potassium, and chromate and bichromate of sodium. In their case is a large crown, formed with crystals of bichromate of potassium, in the centre of which is an incandescence lamp supplied with electricity from a battery charged with bichromate of sodium. The effect will be brilliant when the lamp is lighted at night.

Messrs. Brunner, Mond & Co. show their concentrated soda crystals, and a very fine specimen of bicarbonate of soda struck us as exceptional. Messrs. Peter Spence & Co. represented by their ten-ton "colossal crystal" of alumina, a case of other aluminous products. Messrs. Charles Brothers & Co. exhibit a series of specimens illustrative of the recovery of sulphur from alkali wash by means of lime-kiln gases; this is at the present time very interesting.

Long sabre-like crystals of soda are to be seen in Messrs. Gaskell, Deacon & Co.'s case. These crystals are about 18 inches long, and are remarkable for their size and peculiar shape. Messrs. Charles Tennant & Co. among their products show crystals of the same kind, but much smaller.

The Glasgow Alum Company show two blocks of alum almost rivaling the familiar one belonging to Messrs. Spence. Chlorate of potassium in crystals of unusual size and brilliancy are to be seen in the case of the Widnes Alkali Company. The North British Chemical Company show mercuric iodide in very large and fine crystals, and iodine in large crystals. In pharmaceutical chemicals Messrs. Howards & Sons and Messrs. May & Baker have both good displays. Messrs. Howards show specimens of cocaine, urethane, acetanilid, B.P. scale preparations, salts of quinine, quinidine, cinchonine, &c., all of very fine appearance.

Messrs. May & Baker make a special show of bismuth salts and mercurials; they also give prominence to their new disinfectant, bromidine, which we learn is finding growing appreciation in Scotland. Phenacetine (or para-acet-phenetidine), for which Messrs. May & Baker are sole agents in this country, is shown in the case of Friedr. Bayer & Co., Elberfeld, the makers. They are also makers of sulphonal, the new hypnotic, and this, it is expected, will be on view shortly, but at present the demand is said to be so great that the exhibition samples cannot be spared.

Druggists' bottles are shown by the York Glass Company, Messrs. J. D. Mitchell & Co., and the Forth Glass Works. The quinine tinted bottles of the last named appear to be very good. Chemical apparatus receives attention in the stand of Messrs. Baird & Tatlock, Glasgow. In photographic and microscopic apparatus Mr. Hume, Edinburgh, and Messrs. Geo. Mason & Co., Glasgow, have good displays.

Among the exhibits of lubricating oils we noticed on Mr. John Sandeman's stand a tin of thickish stuff labelled "Journal Grease." The cheque-book being the only "journal grease" we know of, we applied ourselves to the study of this product. Whilst speculating as to the way of using it two sightseers came along and looked into the exhibit. There was a kind of odour of a research laboratory about them, and they evidently had a friend in the journalistic line. Just as we expected to earn how the mysterious substance was applied an extra burst of cheering for the Heir Apparent broke in, and the problem remains unsolved.

Legal Reports.

THE PERFUMED SOAP TRADE-MARK CASE.—JUDGMENT.

MR. JUSTICE NORTH, sitting in the Chancery Division of the High Court of Justice, gave judgment on Wednesday in the application of Messrs. Hodgson & Simpson, soap manufacturers, to register as a new trade-mark for scented soap a device consisting of a figure of Britannia and a lion. The application was opposed by the Lion Soap Company, Bradford.

His lordship said the application to register was made on August 19, 1886, and was advertised on January 19, 1887. On February 24 an objection was carried in by the Lion Soap Company. That came before him in April, 1888, and after argument he suggested that the matter should stand over to enable the parties to come to some arrangement. They had not done so, and he now had to deal with the case. The mark which the applicants desired to register was a figure of Britannia and a lion, with the words "Labor omnia vincit." The Lion Soap Company objected upon the ground that it would interfere with their mark, which was registered some time in 1883. He had the respondents' mark before him. It was, shortly, a letter "L" with a lion looking out between the stem and tail of the letter. The question was whether the trade-mark which the applicants now desired to register would conflict with the Lion Company's rights—was the proposed mark so like that used by the Lion Soap Company as to be calculated to deceive? In this case he was satisfied that the one mark was not copied from the other. One matter did at first appear to him to be suspicious. The Lion Company carried on business at Bradford, and the motto, "Labor omnia vincit," was the motto of that town. The applicants proposed to adopt these words, but it was proved that they formed the motto of the junior member of Messrs. Hodgson & Simpson's firm. The evidence satisfied him that there was no likelihood of the one mark deceiving persons who knew the other. He also came to the conclusion that there was

no probability of persons being deceived by the description as regarded name. In the objections taken by the respondents, there was no objection on the ground that the design was such that it was likely to be called by a name which would be confounded with the name of the respondents. The objections were, first, that the mark was an infringement of the respondents' mark; and, secondly, that by reason of constant and exclusive use the figure of a lion had become identified with the respondents' business. Both these objections went to the appearance of the mark itself, and neither of them had any reference to the name which the mark was likely to get. The only other objection was with reference to the motto, which he had already dealt with. He might also say that he did not think it was likely that the applicants' goods would be called by the name of "Lion," and, further, he found that Messrs. Hodgson & Simpson had already on the register a mark in which a lion was conspicuous. Upon the whole case, he came to the conclusion that the objections were not well founded; and the result was that the objections failed, and the Comptroller must proceed to register the mark.

Judgment for the applicants with costs accordingly.

FAILURES AND BANKRUPTCY REPORTS

THOMAS DOUGLAS BUCKWELL, Burgess Hill, Sussex, Manufacturing Chemist and Druggist.

THE public examination of this debtor, who lately carried on business with E. L. Cleaver, at Great Castle Street, Regent Street, London, W., was held at the last sitting of the Brighton Bankruptcy Court. The debtor's statement of affairs showed unsecured creditors 407*l.* 15*s.* 7*d.* and assets *nil*. The Official Receiver's observations were:—"The receiving order was made on the debtor's own petition on the 21st March, 1888, and on the same day he was adjudicated bankrupt by consent. The bankrupt (who had previously been in business in several places, both in this country and in America) in 1883 went into partnership with a Mr. E. L. Cleaver, and carried on business as wholesale chemists in Castle Street, London. He states that he put 1,300*l.* into the business, while Mr. Cleaver's capital consisted of stock to the value of 550*l.* The partnership lasted 18 months, when, on his application, a receiver was appointed by the Court of Chancery, the liabilities then being 320*l.*, while the assets were 1,500*l.* The whole of the books and papers are in the hands of the receiver, and the bankrupt states that he has received no account." In reply to questions, debtor said that he had been in business in Canada and other places, and always successfully until about four years ago, when, having about 1,500*l.*, he went into partnership. This turned out unsatisfactorily, and he complained in severe terms of the way in which his partner had acted. At length he applied for an injunction in Chancery against his partner, and through the latter's conduct and the costs incurred in the proceedings he was compelled to file his petition. The examination was closed. The debtor pointed out to the Registrar that there were no creditors at the private meeting, and no creditors in attendance at the Court, and no debts proved. The Registrar: And no assets. The Official Receiver (Mr. A. Mackintosh) remarked that no doubt the creditors would have appeared had there been any prospect of a dividend. The following are the principal creditors:—

	£	s.	d.
Fletcher, B., London	232	11	6
Hugo, P. F. "	19	11	0
Peckover, J. "	11	0	0
Strand & Son "	10	0	0
Shumas, T. G. "	10	0	6
Timbull, A. W. "	114	6	1

JOHN JACKSON GOLDSMITH, High Street, Abingdon, Chemist and Druggist.

A SUMMARY of this debtor's statement of affairs discloses liabilities to the amount of 1,180*l.* 17*s.* 5*d.* and assets 361*l.* 19*s.*, leaving a deficiency of 818*l.* 18*s.* 5*d.* The debtor alleges the cause of his failure to be paying off borrowed capital and interest, falling off of trade, and depreciation of profits. The Official Receiver makes the following observations:—"The

debtor started in business as a chemist at Axminster, Devon, about 1878. In September, 1880, he took to his father's business in High Street, Abingdon, Berks. Not being benefited by his father's will, debtor got credit from his sister for 500*l.*, the then value of the stock and fixtures. Of this sum he paid off 100*l.*, and deposited his life policy as security for the remaining 400*l.* The reason the debtor filed his petition was that one creditor for nearly 100*l.* sued him. His books are, on the whole, good ones, and well kept, but they do not show his financial position. He never took stock, and says he only knew he was insolvent when sued. The preferential claims are for a quarter's rent and rates and taxes due since November last. Debtor's deficiency account is made up thus:—Deficiency in 1880, when the father's business was taken to, 200*l.*; since then, bad debts, 50*l.*; excess of household expenditure over profits, 136*l.* 18*s.* 5*d.*; loss on stock 86*l.*, on trade fixtures 50*l.*, and on furniture 46*l.*; interest on borrowed capital, 250*l.* Debtor hopes 'with the assistance of friends to be able to make some offer.'

Re ARTHUR H. BAYLEY, 24 Stonefield Street, Islington,
Medical Labeller or Writer.

IN this case the receiving order was made on April 17, and the accounts filed show unsecured creditors to the amount of 156*l.* 0*s.* 1*d.*, and creditors for rent, 34*l.* 0*s.* 9*d.*, against assets, doubtful book debts for 67*l.* 15*s.* 10½*d.*, which, however, are of no value. According to the observations of the Official Receiver, the debtor attributes his insolvency to loss in connection with a firm by whom he was formerly employed, and partially to the expenses of maintenance of himself and family having been in excess of his small earnings. He states that the little furniture he had was sold in November last under a distress for rent, and that he has no property or assets other than the doubtful debts above referred to. The debtor has been adjudged bankrupt, and an order for summary administration has been made by the Court. The first meeting of creditors will be held on May 11, and the public examination is fixed for May 30, at half-past eleven.

Re WILLIAM BACON HODGSON, of Grosmont House, Manor Park, Essex, Physician and Surgeon.

THE first meeting of creditors under this failure was held on Tuesday, at the London Bankruptcy Buildings, Lincoln's Inn Fields, under the presidency of Mr. Brougham, one of the assistant official receivers. The receiving order was made on April 17, the accounts filed showing gross liabilities amounting to 945*l.* 13*s.* 4*d.*, of which 922*l.* 18*s.* 2*d.* is expected to rank, against assets 138*l.* 14*s.* 10*d.* The debtor's solicitor made an offer of 5*s.* in the pound, but that not being considered to be reasonable, it was increased to 7*s.* 6*d.* However, no resolution was put to the meeting, and it was declared closed, it being left to the debtor to apply for a new meeting if he could make an acceptable offer. The public examination will be held on May 18. The following are the only principal creditors:—

	£	s.	d.
Mrs. Ann Hutchinson, Newcastle-on-Tyne ..	679	10	0
D. Dale, Bristol	180	5	2
Messrs. Hewlett, chemists, Great Eastern Street ..	39	1	8

HENRY D'ARCY POWER, East Dulwich Road, Choumert Road, and 133 Rye Lane, Peckham, Physician and Accoucheur.

THE first meeting of creditors under this failure was held before Mr. Chapman, Assistant Official Receiver, on Tuesday, at the Bankruptcy Buildings, Lincoln's Inn Fields, and was well attended. The receiving order was made on March 24, on a creditor's petition, and the accounts filed show unsecured creditors, 664*l.* 16*s.* 10*d.*; creditors fully secured, 50*l.*; and preferential claims 48*l.* 13*s.* 10*d.*; against assets consisting of book debts 117*l.* 14*s.* 8*d.* Mr. Charles appeared for a creditor, and questioned the debtor at considerable length with regard to the debt of 230*l.* 12*s.* 10*d.* due to Mrs. Jane Hay, mother of the debtor. The debtor explained that the claim was for money lent at intervals, shown upon the proof. He stated that he only kept a cash takings book and

ledger, and for a time kept a banking account with the London and South-Western Bank, which he closed last year. He commenced to practise in September, 1884, in Victoria Road, with a capital of 80*l.*, borrowed from his mother, the rent being 70*l.* a year, and he practised there till about five weeks ago. He also rented The Lindens, 72 Chobert Road, for two and a half years, for which he paid 34*l.* a year; and in May, 1885, bought a practice for 20*l.* from Dr. Arturidge at 58 Beard Road, which he carried on until February last, the rent of this house being 38*l.* a year. He also had a branch business at Crystal Palace Road, East Dulwich, in April 1887 he gave up The Lindens, and took The Labels, East Dulwich Road, at a rental of 70*l.* a year. The cost of furnishing these places was stated to be about 120*l.* or 30*l.* In August 1885 he gave a bill of sale upon the furniture and had paid 50*l.* for interest alone. He estimated his takings from all the businesses at 700*l.* per annum for the last three years, and his personal expenses at about 250*l.* per annum. The debtor also stated that he had lost 800*l.* on some share transactions, besides a salary he received as managing director. Mr. Butler appeared for the debtor, and offered a composition of 2*s.* in the pound, payable in six and twelve months; but this was not accepted, and the matter will remain in the hands of the Official Receiver. The public examination will take place on May 31.

F. W. BROMLEY, Lincoln, Chemist and Druggist.

A MEETING of the creditors of this debtor was held at Lincoln last week, creditors being present or represented (the amount of 5,427*l.* 11*s.* 10*d.* The statement of affairs produced to the meeting showed liabilities to rank for dividend of 6,692*l.* 4*s.* 5*d.*, and available assets estimated to place 983*l.* 18*s.* 3*d.* After discussion, Mr. Moss, a creditor for 3,543*l.* 1*s.* 6*d.*, and Mr. Tomlinson, a creditor for 969*l.* 12*d.* having expressed their willingness to forego their claims to rank for dividend to the extent of 500*l.* each, and it being arranged that the claim of Mrs. Bromley, sen., for 100*l.* should also not rank for dividend, and that the furniture of the debtor should be given up by Mr. Tomlinson for the benefit of the creditors, it was resolved that the debtor's estate be assigned to two trustees for the benefit of the creditors, Mr. George Moss, of Upper Norwood, and Mr. Ald. Maltby, of Lincoln, being nominated as such trustees.

II. P. DEACON, Willesden, Surgeon.

THIS bankrupt applied on Thursday to Mr. Registrar Giffard for his order of discharge. He failed at the end of last year with liabilities of 4,773*l.*, and proofs had been made for 3,947*l.* The assets were estimated at 130*l.* and had actually realised 105*l.*, and a dividend of 3½*d.* in the pound was being paid. The Official Receiver reported that during the two months preceding the bankruptcy the bankrupt had failed to keep proper books, and further that he had contracted debts without reasonable expectation of being able to pay. Mr. Winslow opposed the application on behalf of Dr. Dixon, the bankrupt's late partner, a creditor admitted to proof for 400*l.*; and Mr. Carrington was for the bankrupt. Mr. Winslow asked that his Honour should cause the order of discharge to be suspended, and Mr. Carrington urged that it be granted, or at least be suspended only for three weeks. It was ordered that the order of discharge be suspended for that time only, the only condition being not keeping the necessary books.

JAMES OAKLEY, Birmingham, Druggist.

AT the Birmingham County Court on Thursday, James Oakley, Sherlock Street, Birmingham, druggist, applied for his discharge. His liabilities were returned at 197*l.* while the assets had proved insufficient to pay the cost. It was reported that the bankrupt had traded with knowledge of his insolvency, and had not kept proper books. The court said so long as a trader was successful, it mattered not whether he kept books or not, but if he failed he must take the consequences. He refused to grant a discharge until the bankrupt had paid 100*l.* to his estate.

TRADE-MARKS APPLIED FOR.

THE *Trade Marks Journal* publishes the following notice:—"Any person who has good grounds for objection to the registration of any of the following marks may, within two months of the date of this journal, give notice in duplicate at the Patent Office, in the form 'J,' in the second schedule to the Trade Marks Rules, 1883, of opposition to such registration." The address of the Patent Office is Southampton Buildings, London, W.C.

From the "*Trade Marks Journal*," April 25, 1888.

Figures of a bunch of primroses and a bunch of crocuses; for aerated waters. By J. Lyon & Co., Lord Nelson Street, Liverpool. 64,364-5.

"PICKERING'S POLISHING SOAP," and initials; for a cleaning and polishing preparation. By J. Pickering & Sons, Sheffield. 68,595.

"ARCANOMA"; for a medicine. By A. F. Hartshorn (trading as Hartshorn & Co.), 26 Cullum Street, Fenchurch Street, E.C. 71,642.

Seven round labels; for aerated waters. By F. Kinahan (trading as Lyle & Kinahan), 51 Donegall Place, Belfast. 71,723.

"ROSANIA"; for perfumery. By Oppenheimer Bros. & Co., Sun Street, Finsbury Square, E.C. 72,332.

Label, bearing signature of depositor, and the words "Rubrung," "Ruboleum," and "Rubessent"; for medicines. By George Stocker, Exeter. 72,566.

Figure of a pine-tree; for paints and varnishes. By Gittings, Boothby & Co., Park Lane, Birmingham. 72,987.

From the "*Trade Marks Journal*," May 2, 1888.

"EAU CAPILLAIRE PROGRESSIVE," and other French wording, on label, also oval monogram label; for a hair tonic. By R. Brimmeyr, apothecary, Luxembourg. 66,595-6.

"RESTORATIVE LIGAMENTINE," other wording, and figure of horse and trap; for medicine for horses. By H. J. Guerrier, trading as The Animal Food Company, 40 York Road, Lambeth, S.E. 68,266.

"ZYLO-PLASTIN"; for a medicinal preparation. By Florence E. Hodgson, Abermaw Cottage, Hatton Road, Cheshunt, Herts. 69,732.

"OUR OWN ALL ELEVEN," and monogram; for perfumery. By E. Swann & Co., Wheeler Gate, Nottingham. 70,621.

"DR. HEBERDEN'S BRONCHIAL AND ASTHMA PILLS," and other wording, on label; for a patent medicine. By C. A. Ward, trading as George Lambert, 4 Shern Hall Terrace, Walthamstow. 70,717.

"PACIFICATIO"; for medicines for coughs and colds. By G. F. H. Bartlett, 143 High Street, Battersea, S.W. 71,239.

"LUPULIN," other wording, and figure of a peacock, on label; for an aerated beverage. By R. Weaver, 83 Manchester Road, Hollinwood. 71,446.

"KOMOTONIKON," on shield-shaped label; for a fluid compound for the hair. By Thémis L. Haywood, 56 Hamstead Road, Houndsdorth, near Birmingham. 71,930.

"CITRATO DE MAGNESIA," and other Spanish wording, on label; for citrate of magnesia. By A. Bishop & Sons, Speck's Fields, Mile End New Town, E. 72,014.

"MARTINDALE'S HARNESS COMPOSITION," and other wording, on label; for a polish for harness. By Mary A. Martindale, trading as Nicholas Martindale, 17 Hanover Street, Liverpool. 72,747.

From the "*Trade Marks Journal*," May 9, 1888.

"ROSS'S OLDE ENGLISH BERE," and other wording on shield-shaped label; for ginger-beer. By Ross & Co. (Limited), Weston-super-Mare. 64,847.

"DR. FIELD'S 'SAPRIDINE,'" and other wording on round label; for a preparation for cleansing the teeth. By F. C. Heron, 10 Hatton Garden, E.C. 65,408.

"BRIMMEYR'S EAU CAPILLAIRE HAIR TONIC," and oval monogram label; for a hair tonic. By R. Brimmeyr, apothecary, Luxemburg. 66,596-7.

"KING ARTHUR'S ROUND TABLE DIGESTIVE PILLS," and other wording on round label; for pills. By G. Smith, 117 Attercliffe Road, Sheffield. 66,733.

"CONCENTRATED LEMON SYRUP," and other wording on label; for lemon syrup. By G. Y. Horne & Co., Asher Lane, Red Cross Street, Bristol. 67,464.

"DIPSOTONICA REMEDY," under signature of the depositor; for a medicine. By C. L. Metcalfe, pharmaceutical chemist, Hull. 71,076.

Signature of the depositor across five upright bars; for chemical substances (medicinal). By F. A. Johnson, 30 Darley Street, Bradford. 71,307.

"DIAMOND" on figure of a diamond; for yeast. By H. C. Jansen, Schiedam, Holland. 71,811.

Representation of David stoning Goliath on label; for chemical substances (medicinal). By Cornell & Cornell, chemists and druggists, Ipswich. 71,886.

"HONEY DROP," and signature of the depositor; for a lotion for the skin. By George Stocker, chemist, Exeter. 72,333.

Two crossed swords on bar; for aerated waters. By W. J. Pennington, 15 Watson Street, Swinton. 72,679.

"MUGGLETON'S GALVANIC PIMENTO POWDER" round a portrait; for powder for cure of toothache, neuralgia, &c. By W. H. Muggleton, 46 Sun Street, Finsbury. 72,727.

"MOFFAT'S COMPOUND ESSENCE OF HOREHOUND," and other wording on label; for a medicine. By G. Moffat, trading as E. Moffat & Sons, wholesale chemist and provision merchant, Dutton. 73,014.

Monogram and designation of depositor; for ginger-beer and aerated waters. By J. O. Latus, Hulme Street, Holderness Road, Hull.

"EXCELLENTE EAU DE MENTE PECTORALE DE DALMAHOY," and other French wording under the royal arms; for medicine. By A. S. Hill & Son, 101 & 103 Southwark Street, Southwark. 73,016

NEW COMPANIES.

THE LIVERPOOL PURE ICE COMPANY (LIMITED).—Capital, 20,000*l.* in 1*l.* shares. Object, to carry on the business of ice manufacturers and merchants.

F. ALLEN (LIMITED).—Capital, 25,000*l.* in 1*l.* shares. Object, to purchase and carry on the business of M. F. Allen, wholesale tea and coffee merchant, at 155 Upper Thames Street, and Church Passage, Guildhall, London.

THE DEVON AND CORNWALL MINERAL WATER BOTTLE EXCHANGE AND TRADE PROTECTION SOCIETY (LIMITED).—Object, to organise and carry into effect a system of protection, and for the restoration to the members of lost, misplaced, or misappropriated bottles and boxes.

MANCHESTER ZINC AND AMMONIA COMPANY (LIMITED). This company was registered on April 26, with a capital of 25,000*l.*, in 10*l.* shares, to acquire and work the invention of Harry Grimshaw Hartley Kenyon, for improvements in the manufacture and production of zinc and other sulphides, in the utilisation of residual or waste products therein, and in apparatus therefor. The subscribers are:—W. A. Oddy, Rochdale, merchant, 1 share; J. Kirkman, Chorley, manufacturer, 1; H. Shaw, Lees, potter, 1; H. Kenyon, Clayton, manufacturing chemist, 1; J. Jackson, Clayton, manufacturing chemist, 1; H. Grimshaw, Clayton, manufacturing chemist, 1; D. Shaw, Clayton, oil refiner, 1; T. Worth, Droydsden, indiarubber manufacturer, 1; T. Rowley, 41 Corporation Street, Manchester, merchant, 1. Registered without special articles.

Gazette.

PARTNERSHIPS DISSOLVED.

Brown, G. A., & Cadby, C., Birmingham, drysalters and oil and colour merchants.

Oates, F., Hardman, J., & Oates, R. P. (under the style of James Hardman), Woos Nab, Radcliffe, Lancashire, farmers and aerated water manufacturers.

THE BANKRUPTCY ACT, 1883.

RECEIVING ORDERS.

Forrester, Thomas, Cross Hall Mills, Chorley, Lancashire, dyewood miller.

Preston, Henry Horbury, Penilton, late of Salford, surgeon.

Tinsley, Richard William, Rillington, Yorkshire, late of Whitby, veterinary surgeon.

Wood, John, Chemist and Druggist.

FIRST MEETINGS AND PUBLIC EXAMINATIONS.

Bayley, Arthur H., late of 8, Bedford Street, Islington, present address unknown, medical writer, or writer of embossed letters upon medicine bottles—May 11, 33 Carey Street, Lincoln's Inn; May 30, 34 Lincoln's Inn Fields.

Goldsmith, John Jackson, Abingdon, chemist and druggist—May 15, 1 St. Aldates, Oxford; May 17, County Hall, Oxford.

Kroll, Ludwig (trading as L. Kroll & Co., and the British Hygienic Company), Blundell Street, Cadonian Road, late of Mark Lane, chemical manufacturer—May 15, Bankruptcy Buildings, Portugal Street, Lincoln's Inn Fields; May 31, 34 Lincoln's Inn Fields.

ADJUDICATIONS.

Forrester, Thomas, Chorley, Lancashire, dyewood miller.

Hodgson, William Bacon, Manor Park, physician and surgeon.

Iley, William Henry, Old Shildon and New Shildon, Durham, druggist and grocer.

Lockwood, William, & Leith, John, St. Helens, chemical manufacturers.

Power, Henry D'Arcy, East Dulwich Road, Victoria Road, Choumont Road, Peckham, and 1 Rye Lane, Peckham, surgeon and accoucheur.

Preston, Henry Horbury, Penilton, late of Salford, surgeon.

NOTICES OF DIVIDENDS.

Curtis, Albert Augustus, Gloucester and Sharpness, Gloucestershire, chemist, druggist, and wine manufacturer—first and final div. of 1s. 6½d., May 12, 30 Brunswick Road, Gloucester.

Fitzgibbon, Gerald (trading as Gibbon & Co.), late of Eastcheap, City, and Liversidge, Yorkshire, residing at Headingley, near Leeds, dyewood and drapery broker—final div. of 4½d., May 14, 71 Eastcheap, E.C.

Thomae, Frederick (trading as Frederick Thomae & Co.), Crouch Hall Road, Hornsey, Mincing Lane, and Mark Lane, late of Hornsey Lane, merchant—first and final div. of 10½d., any day except Saturday, Chief Official Receiver's offices, 33 Carey Street, Lincoln's Inn.

The following amended notice is substituted for that published in the *London Gazette* of December 27:—

Fleming, Ernest Laremont, Wavertree, Liverpool, and Old Swan, Lancashire, borax manufacturer—first and final div. of 10½d., any day—Mr. H. D. Estelby's, 24 North John Street, Liverpool.

APPLICATION FOR DEBTOR'S DISCHARGE.

Carruthers, David (trading with Johnson Pickover, as Pickover & Co.), Barnoldy, dry-salter—June 2, Court House, Barnley.

Trade Notes.

WE have received Part I. of Messrs. J. Orme & Co.'s new catalogue of scientific apparatus and chemicals, which extends to 140 pages, and contains over 1,000 illustrations.

MR. T. BROOKS, of Louth, has a new list of formulae, by the help of which every druggist may become a specialist. There are included a number of novel and very saleable articles, the secret of which Mr. Brooks is willing to part with for a small consideration.

MALDON CRYSTAL SEA-SALT, as made by the Crystal Salt Company, is an exceptionally pure product which dissolves readily in water to form a perfect solution, possessing the properties of sea-water. The article which chemists may stock with confidence, not deliquescent, and the crystals retain their cubical structure indefinitely.

MARSHALL COOK'S LIQUID DENTIFRICE.—We received a sample of this new preparation, which we are now being introduced to the trade as a combine wash and gum preservative. It is a pale claret liquid, with a rather unusual vinous flavour and odour, unlike most preparations for similar purposes. It is a very refreshing mouth-wash, and it is appreciated of marked antiseptic and cleansing properties. Marshall Cook & Co., of 70 Berners Street, W., are the makers.

WE represent in the annexed drawing the pretty stand with bent-glass front which Messrs. Burroughs, Wellcome & Co. have had made to display their soluble saccharin, and other varieties of tabloids. It is in this form that saccharin is likely to be tried by the public, and chemists should go half-way to meet the natural



which has been raised in regard to this extraordinary substance. The cases contain a dozen locket-shaped bottles, with metallic screw caps, which sell with a fair profit at 2s. 6d. each for the saccharin preparations, and at the usual rates for other tabloids, which can be ordered in assorted dozens from any wholesaler.

Personalities.

PROFESSOR FLOWER has been nominated for the presidency of the Newcastle meeting of the British Association to be held next year.

PROFESSOR T. H. HUXLEY was born at Ealing, in Middlesex, on May 4, 1825, so that he completed his sixty-third year on Friday of last week.

MR. J. HALL ROBERTS has disposed of his business at Harrow-on-the-Hill to Mr. David Davies (many years of 142 High Street, St. John's Wood). Mr. Roberts has gone to Folkestone. Messrs. Orridge & Co. acted for both parties.

MR. CARLO ERBA, of Milan, whose death we announced in a recent issue, commenced his pharmaceutical career early, sixty years ago as assistant in Bonfio's pharmacy at a salary of 5*l.* a month, and left that situation in 1870 to assume the management of Castoldi's pharmacy in Milan, which was then in a state of considerable decay. There that Mr. Erba commenced the manufacture of pharmaceutical specialties which afterwards made him known far beyond Italy. The first articles which he used up were the gelatinous capsules, then introduced as such by the firm of Mothe, in Paris, which jealously guarded the secret of their manufacture. Mr. Erba succeeded, however, in manufacturing capsules similar to those sold by the French firm, and thereby laid the foundation of his fortune. He died, it is said, worth fourteen millions of francs, proprietor of the largest works of pharmaceutical art in Italy.

PRESCRIPTION ERRORS.

Of the *New York World* reporters, struck with the circumstance that in all the newspaper accounts of death from medicine due to misadventure the druggist or his assistant is always the agent, and never the physician, made inquiries whether the latter never make errors in prescribing. He writes:—

"I am satisfied after careful examination that the physicians' errors exceed those of the druggist by ten to one, and that the services of the coroner are not oftener required in death than a fact notorious in the profession, that a competent druggist carefully studies every prescription calling for powerful drugs, and himself corrects the doctor's mistakes. One serious error by a druggist winds up his business in rapid order. There is no one to stand between the incompetent druggist and his victim, but the careless doctor can depend with reasonable assurance upon the strong probability that his figures are wrong and the dose of the drug is double what it should be, the pharmacist's trained eye will detect the slip or the ignorance and put in the right quantity.

I asked a prominent druggist the other day if he often had to correct prescriptions. He smiled. "I never correct a physician's prescription," he replied. "My business is pharmacy, not medicine."

"In case you got an order calling for ten grains of strychnine, to be taken at once?"

"I could not fill it. I would send it back to the physician with polite note of inquiry. That would be the retort courtois."

"If you examine all prescriptions you compound with a view to possible errors?"

"Certainly. Every druggist is compelled to do that in self-protection. For example, here is a prescription sent here a few weeks ago. Now this, as you see, called for twenty pills of subate of morphine, gelatine coated, each to contain two grains."

"If you refuse it?"

"I filled it—and there was no funeral followed. I gave the patient pills of sulphate of quinine, gelatine coated, for I knew that to be what the physician intended to prescribe. He is getting a little old now and sometimes makes a slip of that kind, but we always manage to set it right. About four months ago one of my clerks brought me a prescription calling for a gramme of bichloride of mercury, or corrosive sublimate, in eight pills. A gramme is sixteen grains, which would have made the dose two grains in each pill—enough to kill an elephant. I sent the prescription to the physician. He used 'gramme' and wrote 'grain,' even then prescribing the maximum dose of the drug—one-eighth of grain."

"Did not 'gramme' be easily mistaken for 'grain'?"

"Not easily. 'Gramme' is usually abbreviated thus, 'gm,' while 'grain' is 'gr.' Many physicians use the metric system, and specify the weight in grammes. Now, if only one drug is ordered the sign 'gm.' may easily be read 'gr.,' and the patient will get only one-sixteenth of the amount intended, or, *versus*, he may get sixteen times too much. The latter case is not so probable, for the druggist's knowledge of dose would interfere. But such a prescription falling into the hands of an ignorant clerk could easily furnish business for the undertaker, and no one be the wiser."

"How often is the judgment of the druggist called into play in such questions?"

"Thus it is a matter of almost daily occurrence, but of course we handle a large number of prescriptions. Most of the mistakes are due to the wretched handwriting affected by some doctors."

"I read another leading uptown druggist concerning his experience with errors in prescriptions."

"They have numbered hundreds," he said, "but as we invariably refer them back when illegible or calling for more than the maximum dose given in the Dispensatory the consequence does not fall upon the patient."

"How do the doctors behave when advised of their mistake?"

"We take it kindly; others try to bluff the case through by saying that heroic doses were required; others get angry. I sent one prescription back to an eminent professor in the city. It called for half grain of strychnine to the

dose. He tore it up, withdrew his patronage, and wrote us an indignant letter, claiming that the prescription called for only 1-25 of a grain. He had destroyed our evidence, and there the matter ended. One night I got a prescription calling for 120 grains of iodide of potassium in three powders, one to be taken every four hours. The regular dose of iodide is from five to ten grains. I sent a messenger to inquire, and the reply was the erasure of 'iodide' and the substitution of 'bromide.' The least consequence of the iodide would have been a furious eruption all over the patient, to which certainly his malady would not justly have entitled him, as he was suffering from delirium tremens."

"Do you have much trouble with quacks?"

"No. Quacks usually give very simple and harmless remedies. They know their incompetence, and constantly fear arrest for malpractice should an accident occur. The quack, as a rule, confines himself to light cathartics, tonics, and lotions, giving a child's dose to an adult and trusting to luck and nature to effect a cure. Most of them compound their own nostrums and thus make double profit, besides avoiding the placing of their errors on record. It is the regular physician and the physician of high standing who is most apt to be careless."

Another evil to which my attention was called is the habit of some physicians, instead of specifying the dose and the time for its repetition, to give simply this general order: "To be used as directed." Perhaps several medicines have been ordered. The invalid may be in charge of an ignorant or forgetful nurse to whom this gives discretionary powers which may easily become fatal. I saw myself a prescription calling for Majendie's solution of morphia and marked in this way. Was not this criminal carelessness?

Medicines are often kept in the household after the illness for which they were prescribed has terminated. The direction of the physician has long since been forgotten. Another member of the family, perhaps a child, is taken down with some petty complaint, and the quondam patient prescribes a dose of the remedy used in his own case. How much shall he give? He looks at the bottle: "Use as directed." He thinks he remembers having taken a tablespoonful, so he administers that quantity. The sufferer grows rapidly worse. The doctor is sent for and finds a case of morphia poisoning. The bottle is produced. The doctor sees "Use as directed," and discreetly holds his peace. Perhaps death follows, and no one is the wiser.

AUSTRALASIAN PHARMACEUTICAL EXAMINATIONS.

"AN OUTSIDER" in *The Chemist and Druggist of Australasia* propounds a "scheme of a uniform pharmaceutical examination throughout Australasia." He suggests that, as good examiners are not easily found, it would be well to extend the application of the principle already admitted in the Preliminary examination, and place the examinations in pure science, botany, chemistry, and materia medica in the hands of experts not connected with pharmacy. The expert in chemistry would set papers of questions, which would be printed, distributed with proper precautions to all the examining centres, from Queensland to Tasmania and South Australia to New Zealand, where the examinations would be held simultaneously; all the papers of answers would be returned to the one examiner, who would afterwards issue his report. The same would be done in the case of the botany and materia medica examinations, and the recognition of specimens could be included without much trouble. For the practical pharmacy examination he proposes that very detailed syllabuses should be prepared by all the societies in common, and that a board of two or three practical pharmacists should examine the candidates at each centre. It is thought that the estimate of three leading Sydney pharmacists as to how far a candidate must meet the requirements of the syllabus in order to be trusted as a dispenser would not seriously differ from that of three leading Melbourne or Adelaide pharmacists. Written papers on pharmacy are also contemplated to be prepared and examined in the same way as the chemistry and other papers.

SOME DRUGGISTS' SPECIALITIES.

Mutual assistance for this department, which is a standing feature of THE CHEMIST AND DRUGGIST, is invited from generous pharmacists.

Grease-cleansing Solution.

Liq. ammon. fort.	3i.
Sapo. moll.	5vj.
Sod. carb.	3ij.
Sod. bibor.	3ij.
Eth. meth.	3j.
Spt. vin. meth.	3j.
Aq. pluv. ad	Oij.

M. and filter.

H. D. R.

Razor Paste (for sharpening razors).

Finely powdered emery	3j.
Plumbago (graphite)	3i.
Jewellers' rouge (ferri perox. precip.) . .	5iv.
Suet	3j.
Cera flav.	3j.

M. s. a.

TOBOGGAN (Montreal).

Shampoo Salts.

Potas. carb.	3j.
Pulv. sod. bibor.	3ss.
Ammon. carb.	5ij.
Pulv. alumen.	3ij.
Ol. neroli	q s.

M. s. a.

Dissolve a teaspoonful in 4 oz. of water, thoroughly wet the hair with the solution, and rub briskly.

It cleans and refreshes the head.

TOBOGGAN (Montreal).

Rosalind.

This is the name of an American speciality, or cosmetic for tinting the fingers, face, and lips, and for preserving the skin, curing chapped lips, &c. It is put up in small white glass ointment jars. *New Idea* states that the following formula may be taken as making a preparation similar in most respects to the original:—

	Grains
Eosine	10
White wax	30
Spermacei	30
Vaseline	410

Melt by heat the spermacei and wax in the vaseline and add the eosine previously dissolved in alcohol q.s. along with sufficient otto of rose to perfume. Stir constantly until the preparation is fit to pour into moulds.

New Whooping Cough Remedy.

Peroxide of hydrogen has lately come into extensive use in medicine. Dr. Richardson says that it has a decided value in whooping cough (so spelt by him). In the acute stage, he finds it stop the cough more quickly than anything short of a change of air. In this respect it resembles the action of dilute nitric acid, which was recommended by the late Dr. Gibb. It subdues the spasmodic paroxysm, checks the secretion of the throat, and shortens the period of the malady, lessening, thereby, the dangers of after effects. The mode of prescribing it is—

Hydrogen peroxide (10 vols. strength) . .	5vj.
Glycerine	3iv.
Distilled water, to	3iij.

Mix.

Dose: $\frac{1}{2}$ fl. oz. in a wineglassful of water.

This has been given with excellent results to nine children. In cases in which stridulous spasm accompanies the cough, he substitutes 5ij. of ozonic ether for the peroxide, or adds it to the mixture.

Veterinary Treatment.

ROT IN SHEEP.

TO the non-agricultural mind this expression is not in the least explanatory, and the amateur may confuse it with another disease affecting the feet. Rot, so called, is a very serious disease, arising from the presence of parasites in the liver of the sheep. They are called flukes, and occupy the bile-ducts to such an extent as to block the current of bile both by their bodily presence and their excrementitious matter, which is of a granular nature, especially calculated to fill up these small but important channels. Small numbers of these undesirable guests may be entertained without serious inconvenience to the "host," and very few Welsh sheep are found to be entirely free from them when slaughtered.

In wet seasons and upon low ground rot may be not dreaded (always excepting salt marshes), the reason being that flukes pass through several stages of development in small molluscs that can themselves only subsist in moist places. It is only in exceptional seasons that flukes are of any account on the South Downs or the chalk hills of Surrey, but the fens are never free from them. When they occupy the liver in large numbers their presence interferes with the portal circulation, and dropsy is the result. During the first six weeks of a sheep being attacked with fluke or the rot the animal will decidedly improve in flesh by the stimulation of the liver, and wise flockmasters take advantage of this to fatten them before the muscular fibres become flabby, or, in other words, the flesh becomes unfit for food. If allowed to go on, the sheep rapidly loses flesh, becomes "razor-backed" and "pot-bellied," like a rabbit fed entirely on green-meal, and wool comes out in handfulls, and the wretched creature wastes to a skeleton.

To kill a parasite in such a secure retreat is obviously impossible, as he cannot be got at through the stomach, and any remedy intended to act through the circulation must be strong enough to kill the sheep. In making this remark we are perfectly well aware that many persons with more anatomical knowledge believe they can kill flukes by the administration of ol. terebinth., sodæ chlor., chickweed tea, nettle tea, and other remedies, but they are deceived by the fact that sheep improve in the early stage with these remedies at all, and fatten more rapidly if given cordials, only during that period.

If they be penned on dry ground and fed on fattening mixed with condiments, great loss can be prevented, and the country chemist can benefit his client and the public as well as himself by establishing a good sale for the following powder:—

Sodæ chlorid.	3xx.
Pulv. Fœnugræc	3x.
„ Carni	3x.
„ Anisi	3x.

M. To be mixed with corn or broken cake, the above quantity being a sufficient daily allowance for twenty sheep.

THE irritation caused by the bites or stings of insects is allayed by the administration of two drops or more of oil of saffras on a lump of sugar every two or three hours.

THE PHARMACIST'S NEW TYPE-WRITER.—"How do you like your new type-writer?" inquired the agent.

"It's immense," was the pharmacist's enthusiastic response. "I wonder how I ever got along without it."

"Well, would you mind giving me a little testimonial to that effect?"

"Certainly not; with pleasure."

So he rolled up his sleeves, and in an incredibly short time pounded out this:—

after Using thee automatic Backactionn atype writer for thre emonths and Over: i udhesitattngly pronounce it to be al ad even more than th e Mannfact claim for it. During the time been in our possession th ree monthz! id has nore th an than paid paid for it! el the Saving of F time and labrr"? john B Snit

"There you are, sir."

"Thanks," said the agent, dubiously.

Scientific Notes :

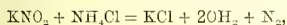
On Chemistry, Pharmacy, Botany, Materia Medica, &c., Original, Selected, and Translated.

GOOSE FAT.

MR. W. C. YOUNG, F.C.S., has made an examination of goose fat, and reports on four samples. The mean of the results as published in the *Analyst*, is as follows:—Specific gravity at 100° F., 0.9089; soluble fatty acids, 2.38 per cent.; insoluble fatty acids, 93.62 per cent.; saponification equivalent, 292; percentage of KHO required, 19.21. The soluble fatty acids are not volatile, in this respect differing from those of milk.

ESTIMATION OF NITRITES.

A METHOD of estimating nitrites either alone or in presence of nitrates and chlorides was recently brought before the Chemical Society by T. Cuthbert Day. The method consists in saturating the solution containing the nitrite with solid ammonium chloride, boiling the mixture in a suitable apparatus, after removal of the air by carbonic anhydride, and collecting and measuring the nitrogen evolved; interaction takes place according to the equation—



hence the quantity of nitrite present in the substance under analysis is calculated from half the volume of nitrogen obtained.

CROTON OIL.

KOERT has recently (*Chem. Zeit.*) attacked Senier's theory that there are two principles in croton oil—one a cathartic, and the other a vesicating body. His belief is that both effects are due to Buchheim's crotonolic acid, which exists in the oil partly as a glycoside, and may be prepared by treating the oil with a hot saturated aqueous solution of barium hydrate, whereby the fatty acids are precipitated. They are collected, well washed and dried, and the oleic and crotonolic salts dissolved out with ether. After evaporation the residue is treated with absolute alcohol, which dissolves out the barium crotonolate, which is decomposed with sulphuric acid. Koert denies that the oil is separable by means of alcohol into the two portions mentioned by Senier, and states that the solubility of the oil depends mainly upon its age. Some varieties are soluble in all proportions; while crotonolic acid itself is readily soluble in alcohol, the solubility of the oil bears no relation to the quantity of free crotonolic acid present.

ESTIMATION OF EMETINE.

LI ON gives the following process in the *Chem. Zeit.*:—Rub together 25 grammes of the powdered ipecacuanha root in 25 cc of water and 20 grammes of slaked lime, and after this has been well rubbed up add 30 grammes more of slaked lime, and treat the mixture with 300 cc. of ether in a suitable extraction apparatus, filter the ethereal solution (about 200 cc.) if it contains any solid matter, and make it up to 200 or 250 cc. Place 50 cc. of the solution in a 100-cc. flask; to this add 5 cc. of semi-normal sulphuric acid, and 4 to 5 drops of freshly prepared concentrated extract of logwood. After thorough shaking the mixture divides into a colourless ethereal layer and a yellow aqueous layer. The acids contained in the solution are neutralised by adding semi-normal ammonia, drop by drop, until the aqueous layer is coloured red, and the difference between the amount found and that originally used shows the amount of alkaloid which has combined with the acid.

CARBOLATE OF MERCURY.

This compound originally recommended by Gamberini was a basic salt, having the composition $\text{C}_6\text{H}_5\text{OHg.OH}$, and prepared by dissolving 122 parts of carbolate of potash in 1,000 parts of water, and pouring the filtered solution into a solution of 271 parts of mercuric chloride in 8,000 parts of water. An orange-coloured precipitate is formed and collected on a filter, thoroughly washed, and dried in the

dark at a temperature of 80° C. The neutral salt is, however, preferred; its formula is $(\text{C}_6\text{H}_5\text{O})_2\text{Hg}$. To make it dissolve 188 parts of absolute phenol and 56 parts of solid caustic potash on a water-bath in the smallest possible quantity of alcohol. Add to this an alcoholic solution of 135 parts of corrosive sublimate. Evaporate the mixture nearly to dryness, with constant stirring; add some boiling water and collect the product on a filter; wash first with pure water, then with water containing acetic acid; drain the product on a porous tile, and recrystallise from alcohol. The salt forms colourless needles, nearly insoluble in water and only slightly so in cold alcohol. It dissolves in 20 parts of boiling alcohol, also in ether and in glacial acetic acid. It is not decomposed by caustic alkalies, by sulphuretted hydrogen, or even by ammonium sulphide. Dose, $\frac{1}{2}$ to $\frac{1}{3}$ grain three times a day.

ACETIC ACID FERMENTS.

It is generally held that the production of acetic acid in saccharine and alcoholic solutions is due to the organism named *Micrococcus aceti*, which is well known to the microscopist by its roundish cells, somewhat flattened at the sides, either existing singly or united in rods or chains. E. T. Hansen has, however, shown that another micrococcus, named by him *Micrococcus Pasturianus*, behaves almost in every respect in a similar manner. There is this exception, however—whilst the ordinary *M. aceti* cells are coloured yellow with iodine, the cells of *M. Pasturianus* are coloured blue with the same reagent. It is clear, therefore, that *M. aceti* is not the only ferment capable of forming acetic acid from alcohol; indeed, this function has been observed in two or three other forms of bacteria. In the manufacture of vinegar, if the acetification process be pushed beyond a certain point, the acetic acid percentage, instead of rising rapidly, falls. This is due to the fact that when the oxidation of the alcohol by the life-action of *M. aceti* is complete, the ferment proceeds further to decompose the acetic acid first formed, producing carbonic acid and water.

ANALYSIS OF PEPPER.

In a paper on pepper adulteration and pepper analysis, recently communicated to the Society of Public Analysts by Mr. F. M. Rimmington, F.C.S., pharmaceutical chemist, of Bradford, the author lays special weight on the importance of the microscopic examination of the condiment. The best plan, according to Mr. Rimmington, is to shake one or two grammes of the pepper with alcohol in a test-tube, allow to settle, and pour off the alcohol into a test-tube, repeat the washing, and then do the same with water to which a few drops of potash solution have been added. The second addition of water need not be poured off. The tube is now allowed to stand for five or ten minutes, and the deposit will be found to have arranged itself in two or three strata; the upper stratum (if a little be withdrawn with a pipette) will be found to contain the elements of most interest. A very small portion of this matter is now to be placed on a slide, and examined with a microscope with a power of 150-250 diameters and a sub-stage condenser; every particle should be seen clear and well defined, and any foreign bodies will be recognised. If the starch granules are to be examined as to form and size, a magnifying-power of 250 or more will be necessary. The sediment in the beaker may also be examined for what may happen to be there. The author also called attention to the characteristic structure of long pepper, and submitted drawings of some sections. [These will be found in the *Analyst* for May.] The fruit-spike of long pepper consists of a mass of fibrous and cellular tissues, in which is embedded a great number of small baccate fruits—it is these little berries that constitute the useful and active part of the fruit, the investing structures of the spike being useless. When a section of a spike of this pepper is examined microscopically the interior of these little berries is found lined with a stratum of cells immediately beneath the rind or cortex, of an elongated and somewhat cylindrical form, and truncated ends; the cells are comparatively large, and are filled with spherical bodies that have the appearance of starch cells. But besides these bodies there is another form of starch not enclosed in cells, but apparently imbedded and intermixed amongst the large cells. This is the characteristic starch of long pepper; it is much larger than the starch granules of black or white pepper, nearly approaching the size of rice starch, and has a well-marked granular figure.

BRITISH AND FOREIGN CONSULS' REPORTS.

BELGIUM.

Trade at Antwerp. During the year 1887 business at Antwerp is described as having been, on the whole, more favourable to commerce than in some years which have preceded it. There has been a revival of activity in certain branches of trade. Freights have had a tendency to improve, and the returns of navigation show an increase in the number of vessels, as well as in their aggregate tonnage.

BULGARIA.

The Otto of Rose Industry. The prosperous condition of the otto of rose culture in the valley of Kezarlyk has led other districts of Bulgaria to develop the same industry, particularly the inhabitants of Strema, and of Toundja, at the foot of Mount Rhodope. It is not yet certain that the attar from these new districts will equal in quality the famous product of Kezarlyk. The Government, however, is anxious to encourage this movement, and the Department of the Interior has lately authorised the purchase of a certain quantity of attar prepared at Strema and at Toundja. Specimens of each are to be sent for examination at the laboratory of the University of Moscow, and the result is to be published.

CANADA.

Imports of Drugs and Chemicals. During the year ending June 30, 1886, Canada imported from abroad \$1,190,781 of dutiable drugs, chemical products, medicines and dye-stuffs, and \$1,233,307 of duty free chemicals. In the year 1885 the figures under these heads were respectively \$1,226,867 and \$1,251,058.

A good Opening for French Drugs. The French Consul at Quebec states that French drugs and pharmaceutical specialities are highly esteemed in Canada, and that in this branch of trade, the prospects being so encouraging, his countrymen would still find a very good field open. During the fiscal year ending June 30, 1886, Canada's imports from France were:—Drugs, \$39,949; chemicals, \$68,918; perfumery, \$3,987; pomades, \$1,825; soap, \$8,348; oils, \$12,866; seeds and roots, \$19,450; scientific and optical instruments, \$14,469.

CHINA.

The Trade of Ssü-ch'uan. A report on the trade of the province of Ssü-ch'uan—a part of the Chinese Empire which has until now remained practically outside the influence of Western commerce in China, but which has a population of 71,000,000, and covers an area of 166,800 square miles—states that the total value of the annual export of drugs by the Yang-tze river, the only navigable outlet of the province, amounts to 300,000,000 of taels, but that "foreigners are not sufficiently interested in this trade to make it worth studying." For this reason, probably, no further information on the subject is vouchsafed.

Aniline Dyes for Canton. The important and growing trade in aniline dyes is entirely in the hands of German firms, who mostly import dyes manufactured by certain German factories who have succeeded in creating an established reputation on the China market. The large silk and paper works of Canton and Fatchan (a town about sixty miles distant from Canton) use enormous quantities of these dyes, and all the more because Chinese do not add any acids to increase the dyeing properties of the aniline. The manner in which the dyes are packed and got up greatly influences their prospects of sale on the Canton market, elegance and neatness of labels being especially looked for; while it is an additional advantage if the name by which the importing firm is known among the Chinese is added in Chinese characters. The bright white glass bottles in which the dyes are packed should not be too small in size, even although the contents do not entirely fill the vessel. The label should not encircle the bottle altogether, but a space of about $1\frac{1}{2}$ inch, be left open. For the retail trade 2-oz. bottles are preferable, but, as the Canton dyers above all things look to cheapness, packing in small tins, containing 8 or 20 oz., or large ones of $\frac{1}{2}$ and 1 cattie, is

especially recommendable for this market. Lately 16 oz. tins have been in demand for old-established brands, but is not advised to send new makes in this packing. Each tin should be packed in smooth coloured paper of the exact shade of the dye contained in it. The principal colours used are scarlet, pink, green, and blue. The two former are particularly required for the manufacture of coloured paper, as the Chinese use red coloured visiting-cards, and contracts and other important documents are invariably written on red paper, while pink is mainly used for ruling letter-paper, books, &c. The use of red and pink in cotton and silk-dyeing is unimportant. Green, blue, and magenta are used mostly for silk, and but little for either paper or cotton. Violet, orange, and yellow also are used almost exclusively for dyeing. All dyes should be easily soluble in water, as the Chinese decline to use any acids in conjunction with anise, and only employ a liquid prepared from rice to dissolve and green colours. At present Canton imports about \$15,000 worth of aniline dyes per annum, but that quantity is pretty certain to increase in future.

The Cassia Lignea Trade.

The opposition of the cultivators of cassia lignea in the province of Kwangsi against the newly-formed cassia syndicate caused the Viceroy, in the spring of 1887, to again grant the old cassia merchants permission to trade with the producing districts. These old traders compete very strongly with the syndicate, and consequently the price of cassia fell to the lowest point ever known, viz., \$5.60 per picul, at which price contracts were made. The shipments of cassia lignea and broken cassia from Canton during the year 1887 reached the abnormal figure of 140,733 piculs, against 79,434 piculs in 1886, while in former years an export of 100,000 piculs was considered exceptionally high.

The Opium Trade at Wuhu.

The import of opium into Wuhu for the last three years has been as follows:—1885, 453 chests; 1886, 5,751 chests; 1887, 4,447 chests. The importation in 1887 was all Malwa, except seven chests of Patna. During 1885 smuggling went on wholesale from the houses of traders under British protection. It was a very unsatisfactory state of things, but the traders were within their right under the treaty, and nothing could be done; hence the large import of 1885. During the greater part of 1886 a singular plan was devised by which the traders under British protection were converted, to use a Chinese metaphor, from wild into domestic fowls, and turned into barn-yard plenty. A ring was formed that farmed the opium lekin revenue from the officials, at a figure much below the established tariff, and bought off the British traders by a handsome monthly payment to import no opium. The native dealers landed the opium themselves, and paid a reduced lekin to the ring, who paid a stipulated amount per mensem to the Government and the allowance to the British traders, keeping a surplus for their pains. Under this curious régime opium got through its lekin on easier terms in Wuhu, by about 20 taels a chest, than in the neighbouring ports of Chinkiang and Kiu-kiang, and a large area is therefore supplied hence that would ordinarily buy at the ports. This accounts for the large import of 1886. New rules, which came into force on February 1, 1887, in pursuance of the additional article of the Chefoo Convention, and which make both duty and lekin payable to the Foreign Customs, have rendered smuggling and compromise impossible; and the import last year diminished accordingly.

Under the new rules, when the duty, 30 Haikwan taels, and the lekin, 80 Haikwan taels per 100 catties, have both been paid, a pass is issued to the importer, on which the weight of opium passed is entered, and he is allowed to take the goods and pass away. When he wishes to repack the drug in small parcels, he brings the opium and pass to the Foreign Customs, where the amount repacked is entered on the pass. When the whole weight covered by the pass has been repacked, the pass is cancelled. The lowest size of repackage is two balls of Malwa, i.e. about 18½ Chinese taels, the size that appears to suit best the wants of the trade.

Preservation of Books from Insects.

In certain parts of China, the British Consul at Swatow observes, books are extremely liable to be attacked by insects. They first destroy the glue used in the backs of books, and gradually perforate the whole volume. Cockroaches, too, entirely disfigure the covers by eating away patches of the glaze.

Theremedy for both these nuisances is easy. The late Dr. Hare, who had a large library, used the following recipe:—

Corrosive sublimate	5 drachms
Cresote	60 drops
Rectified spirit	2 lbs.

The mixture, a violent poison, he applied with a brush in the joint of the book between every six or seven pages, and, as preventive of the ravages of cockroaches, he varnished the cover of the book with a thin clear spirit-varnish. In binding books, it would be only necessary to add a small quantity of the above mixture to the glue used, and to give a coating of spirit-varnish to the cover, to secure complete protection from the attacks of insects of all kinds.

COLOMBIA.

Cathagena Exports. The exports from Carthagena during the year 1887 include the following articles affecting the drug trade to the principal countries trading with the port. The figures represent the weight of the exports in kilogrammes:—

	United Kingdom	United States	France	Germany
Am	500	—	—	—
Bams	348	3,490	530	3,745
Br .. wood	—	—	—	—
C	25,570	45,468	8,080	—
Pa	6,578	23,085	—	24,070
Pe	—	—	60	—
Sp	—	—	780	—
Ma	—	—	—	—
Se	—	—	—	—
So	180	1,222	—	—

COSTA RICA.

Ginger and Sarsaparilla. The forest lands of the Central American Republic of Costa Rica abound in cedar and other woods, but the expense of getting them round to the port is too great at present to make a profitable business. Sarsaparilla and ginger are natural products, and, although the former is exported to a small extent, the latter is entirely neglected, more for the want of practical knowledge in preparing it for shipment than anything else; and no doubt the cultivation of this article could be made a profitable one to anybody understanding it, as also many other products which are neglected for the same reason.

Opening up the Country. During the past year the Government granted a concession to Marco Aurelio Soto, Ex-President of Honduras, for the formation in the United States, or in Europe, of syndicates or societies with the view of making known the riches and natural products of the country; who, with capital, would come and establish mining, agricultural, and other industries, to which the Government concedes about 7,000 acres of land, and grants for ten years all existing laws and privileges which favour this class of industry. All machinery and agricultural implements can be introduced free of duties; neither do the colonists and labourers who arrive to join in the work referred to pay duties on luggage, cattle, and other accessories.

ECUADOR.

Bark Exports from Guayaquil. The port of Guayaquil exported in 1887 549 quintals of bark of all varieties, worth 1,647l. In 1886 613 quintals, worth 2,452l., were shipped.

DUTCH INDIAN POSSESSIONS.

Gum Benjamin Exports. During the year 1887 6,298 piculs gum benjamin were exported from Padang (west coast of Sumatra). Nearly the whole of this went to Java, small shipments to Holland, the Straits Settlements, and America. This quantity is one of the largest on record, but it should be observed that the shipments of gum benjamin from this port are steadily on the increase. In the thirty years from 1858 to 1887 inclusive, 1,901 piculs have been exported from Padang.

FRANCE.

The Marseilles Oil Trade. The year 1887 has not been any better than the previous one for the oil manufacturers, as owing to the continued crisis many of the factories are shut up, whilst others have reduced their work. The decline in the price of oils, increasing scarcity of foreign markets for it, and the high local railway tariffs, which although reduced in 1887 are still higher than in 1884, have all tended to render the position of the Marseilles manufacturers a difficult one, and it is stated that, of 1,500 presses that exist in the town, about 450 have ceased working within the last two years, and it is feared that there is no prospect of any great amelioration in the state of affairs in the near future, although the amount of oleaginous seeds imported during the year has increased considerably, as compared with 1886.

A decrease has taken place in the quantity of olive-oil imported for table use, as compared with 1886, principally to be accounted for by the crops of olives having been below the average in Italy, Algiers, and Spain, but also by the increased use of cotton-seed oil as an article of food—up to 1886 it was used to a certain extent mixed with olive-oil, in the proportion of about 3 to 7—but, for the last year, work having become scarce at Marseilles, the labouring classes have taken to consuming it without mixture, this oil being sold by the retail dealers at a much cheaper rate.

Soap Exports. The amount of soap exported from Marseilles during the year 1887 was somewhat less than the quantity shipped off in the previous year, and amounted to 8,915 tons. The countries supplied are principally Algeria, Roumania, West Coast of Africa, Mauritius, Cochinchina, Tonquin, and Japan. There are about 100 soap manufacturers in Marseilles and the rest of the Department, and their collective production has been about 100,000 tons, of the value of 2,000,000l.

About 70,000 tons have been sent from Marseilles by rail, and the balance was exported by sea, or remained for home consumption.

FRENCH COLONIES.

Pepper. Among the exports from Saigon in 1887 were 3,542 piculs pepper, principally grown in the province of Hatien. The greater part of this crop goes direct to Singapore by native vessels; the extent of land under cultivation for this purpose is 750 acres, roughly computed.

Tahiti Drug Exports. The exports from Tahiti during the past two years include the following articles of interest to the drug trade:—

	1887	1886
Arrowroot	4,026 lbs.	347.
Beeswax	4,385 lbs.	192.
Lime juice	8,987 gals.	374.
Vanilla	7,610 lbs.	3,044.
		8,403 lbs.
		2,522.

Opium in Tahiti. During the past year appeals have been made to the Administration to take steps for the prevention of the sale of opium in Tahiti. It is a notable fact that in the Marquesas Islands, where the consumption of the drug amongst the natives, and especially the women, is very considerable, the population is rapidly diminishing, and it is feared the result will be the same in Tahiti. The Administration are aware of this, and more stringent orders have been issued to the police to prevent the Chinese from disposing of the drug to the natives.

The price to be paid for the sole licence to sell opium for a period of two years is open to public competition, and sealed tenders are received by the Administration at the stated periods. The contractor (*fermier*) is allowed by law to sell 1,100 lbs. per annum, and that only to Chinamen; but there is no doubt a great deal more than that is sold, and that it finds its way into the hands of the natives, amongst whom the consumption is increasing. The cost of opium in San Francisco is about 16s. It is sold in Tahiti at 5l. to 5l. 16s. 8d. The successful *fermier* at the last adjudication obtained the licence for 66,000l. per annum. Including this amount and all possible charges and expenses, a profit of 45 per cent. to 50 per cent. per annum is made on the sale of opium at Tahiti.

TRADE "SANITAS" MARK.

DISINFECTANTS

(FLUIDS, POWDER, SOAPS),
NON-POISONOUS, PLEASANT, AND BEST.

Used by more than 1,000 Boards of Health and Hospitals.

Gold Medals, Calcutta 1883-84, Paris 1885, Antwerp 1886.

THE "SANITAS" COMPANY, LIMITED,
Letchford's Buildings, Bethnal Green, London.

SECURUS JUDICATOR BISTERRARUM

Apollinaris

"THE QUEEN OF TABLE WATERS."

The filling at the Apollinaris Spring during
the year 1887 amounted to

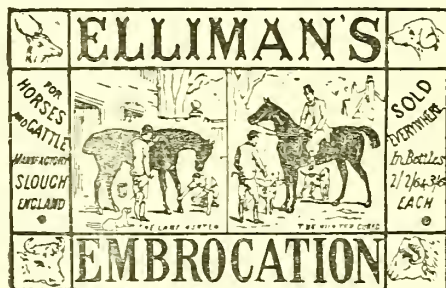
11,894,000 Bottles.

SILICATED CARBON FILTERS

AERATED
PATENT MOVABLE BLOCK.

See Advertisement, page 35 (bottom folio).

SHOW CARDS, 24×17 or 17×12,



Free to any Address.

DR. RICHTER'S PAIN EXPELLER

1, 1½ and 2 9, is regularly stocked by the Wholesale Houses.

USUAL TRADE TERMS.

DEPOT FOR THE UNITED KINGDOM:

DR. RICHTER & CO, 1 Railway Place, Fenchurch St., London, E.C.

MUMFORD'S PURE CRUSHED LINSEED

17/- per cwt. (bag included), 10 - in 25 and 50 lb., 20 - in 7 and 14 lb. parcels
1 lb. tins, 5 - per doz. Best Quality. No Oil Extracted. Carefully
Cleaned and Ground, so as to retain the natural colour of the seed without being
heated. G. S. MUMFORD FARRINGDON ROAD, LONDON.

Woodhall Spa

STRONGEST BROMO-IODINE MINERAL WATER

Especially recommended by the Medical Profession

For RHEUMATISM, GOUT, and SCIATICA, Chronic
Skin Diseases, Scrofula, Rickets, and some Diseases peculiar
to Women.

The Woodhall Bromo-Iodine Water is now being bottled at the
and can be obtained from any Chemist, or on application direct to the
Spa, Woodhall, Lincoln.

Note.—The NEW BATHS and PUMP ROOM
are now open to the Public.

Woodhall Spa

*Do you make your Tinctures and
Infusions with Fletcher's New
Liquors? If not, send to the
Manufacturers for a Trial Sample.*

EDITORIAL NOTES.

THE PHARMACEUTICAL COUNCIL ELECTION.

We have done our best to assist the Pharmaceutical Society to rouse up some interest in the annual election of their Council by devoting one of our "post-card competition" to feeling the pulse of the trade in reference to the candidates. We have also had the honour of publishing election addresses from Mr. Gwilym Evans, one of the councillors at present holding a seat, and from Messrs. Watt and Wills, and now from Mr. Nichol, all new candidates. Another useful effort to stir the natural apathy of members of the Society has been attempted by Messrs. Bengier, of Manchester; Maindale, of London; Proctor, of Newcastle; and Reynolds of Leeds. These gentlemen have "gone for" one of the new candidates with a directness and vigour which leave nothing to be desired. They have issued a circular to all very severely animadverting on the impropriety of the candidature of Mr. G. S. V. Wills. This impropriety is alleged to consist in the fact that Mr. Wills is engaged in the business of educating candidates for the Society's examinations, as it is considered that the election of gentlemen in such a position may jeopardise the existing right of the Pharmaceutical Council to select the examiners. This is how the argument is stated:—

"Probably the most important act performed by the Council during its year of office is the selection of the Board of Examiners. The judicial fairness with which this has been done may have prevented our recognising the fact, just as accurately-adjusted machinery causes no friction or jarring noise. But it is by no means a matter of course that the Legislature should continue to permit the Pharmaceutical Society to elect the whole of the Boards of Examiners in England and Scotland. That privilege is a most honourable one; but if proprietors of educational establishments conducted as a matter of business had been members of the Council in 1868, it is not likely the privilege would have been granted. It is equally probable that this privilege might be taken away if such a breach of propriety were committed. Moreover, if the head of one pharmaceutical school

exhibits anxiety for a seat upon the Council, it is doubtless disposed to carry advantages, and for the sake of these, or merely in self-defence, other teachers may make the same claim upon the electors."

Mr. Wills has of course replied to this attack in a counter-circular, ridiculing the bogey flaunted before the voters as the exception of an over-sensitive or prejudiced mind. All this is it should be. Candidates for public positions must not be surprised or hurt if their qualifications or defects are publicly discussed. They have no right to expect canonisation without submitting to the preliminary ordeal of attack like *advocatus diaboli*. We should have a great deal more intelligent voting at the elections if somebody would undertake that office in reference to all the candidates.

In this particular case we are inclined to think the names at the foot of the circular are its most formidable part. The selectors are all men of light and leading in the pharmaceutical world, and their advice deserves to be treated with the highest respect. But that their argument is somewhat fetched will be recognised when it is remembered that the present system of appointing examiners could only be changed by an Act of Parliament, and that the Privy Council could always veto the Pharmaceutical Council's selection by a much simpler process than that. The suggestion of an "ex-*terro* grind" is one which with a little ingenuity might be raised, and it is one which it is generally best to leave to the good sense of the electorate. Those of us who could not possibly be charged with any taint of self-seeking are so few that we hardly count. Whether Mr. Wills will make a good councillor or not we cannot say; but we should have thought that in the event of the organisation of a curriculum scheme becoming necessary the Council would welcome the assistance of one who might be looked upon as representing in some degree the interests of other pharmaceutical schools than those of direct society origin.

THE FREE-TRADE MOVEMENT IN AMERICA.

SEVERAL New York wholesale dealers and manufacturers connected with the drug and chemical trades have communicated to a representative of *The Oil, Paint, and Drug Reporter* their views on the proposed revision of the American tariff. With a few exceptions they are decidedly hostile to the measure, and it is evident that the arrangement which would be most acceptable to these gentlemen would be to leave each one's own particular speciality strongly protected and all other goods admitted free of duty. But, as they are aware that this cannot be, the next best thing, in their opinion, is to combine to protect native industries and, to use the hackneyed cry, to preserve America for the Americans. Some of the gentlemen interviewed strongly protest that they are theoretical free-traders, but that, in practice, they have been reluctantly compelled to embrace protectionist views. Others, such as Major Horner, of the firm of James B. Horner, are protectionists pure and simple. Says that gentleman: "I am in favour of protection every day, and am decidedly opposed to the passage of this Bill, or any other Bill that does not protect American industries. It is better to let the agitation alone than to have this kind of tinkering, which is neither one thing nor the other." A sentimental smacking of the good old Corn Law times. Congressman Darwin R. James, of the firm of Packard & Ames, thinks that the Bill will very seriously cripple all the industries which it affects, and that the American people, as a whole, do not desire its passage. Mr. J. A. Velsor, speaking for Messrs. Peek & Velsor, calls attention to the desirability of removing certain duties, such as that now levied on dandelion

root, which, as a medicinal root, ought to be free, but which is actually dutiable because the Customs authorities persist in considering that it is imported mainly as an adulterant for coffee. Mr. Daniel C. Robbins, since deceased, considered that the proper method of proceeding would be to take off the duties on all raw products, but to retain those on manufactured articles. Messrs. Weaver & Sterry, together with several others, deplore the prolongation of the uncertainty now prevailing with respect to the future commercial policy of the country, and also believe that the Bill might have consequences entirely opposed to the intentions of its authors, and that the lowering of duties might bring about such an increase in the imports that the revenue would actually increase instead of diminish, which seems a very good argument for removing duties altogether. Mr. H. W. Fuller, a manufacturer of quinine, thinks that in fixing the position of that article in the tariff, regard should be had to quinine imported from countries where an export bounty obtains—a remark obviously aimed at the *Fabbrica Lombarda*. Messrs. Dodge & Olcott and Schering & Glatz view the threatened passage of the Bill in a very pessimistic light, the former considering it a "most inconsiderate and most inequitable measure for the drug and chemical trades," while the latter "have been informed by many manufacturers that the passage of the Bill would compel them to remove their machinery to Germany, where their goods could be made and sent to the United States (freight paid), at a less price than the cost of manufacture in America would involve." Messrs. Lazell, Dalley & Co. do not appear to approve of the Bill, which, they think, will assist in fostering industry abroad at the expense of the American people, yet at the same time they consider that cod-liver oil should be placed on the free list in spite of the fact that about 10 per cent. of the American consumption of this article is provided for by struggling native manufacturers. But it should be said that in desiring the removal of the cod-liver oil duty Messrs. Lazell, Dalley & Co. are merely actuated by the desire to benefit suffering humanity—an object for which the makers of American cod-liver oil will no doubt sacrifice themselves with alacrity. Messrs. Smith, Kline & Co. call upon the "thirty thousand retail druggists, all wholesale druggists, and the manufacturing chemists to join all interested in American interests in one long and loud protest against the Bill"—a flight of oratory not likely to commend itself to the thirty thousand retailers, who can have little interest in bolstering up the raucous monopolists. Among the few firms who declare themselves straightforwardly and on principle in favour of the Tariff Bill are Messrs. Stallman & Fulton, who think that the principal defect of the Bill is that it does not go far enough in the direction of free trade; Messrs. Lehn & Fink, and, *mirabile dictu!* Messrs. Roessler & Hasslacher, the chemical manufacturers. The prevailing opinion appears to be that the Bill has no chance of passing during the present session of Congress, and will be made the rallying cry at the forthcoming Presidential election. The firms interviewed agree upon one single question only, viz., the desirability of the entire abolition of duty on alcohol used in arts and manufactures—a request which may not improbably be acceded to by the Legislature.

TRADE-MARKS AND THEIR REGISTRATION.

CONTINUING our remarks on the recent report issued by the Board of Trade's Committee on Trade-marks, we note as one of their most important recommendations the short one to the effect that the bond to the amount of 200*l.* ought not

longer to be required in cases of opposition. It will be remembered that it was the requirement of that bond which broke down the well-meant efforts of the Chemists and Druggists' Trade Association in their crusade against the registration of common trade-marks. No such bond is required in the case of opposition to patents, except in the case of foreigners; and there seems no reason to retain such an exceptionally heavy caution against frivolous and unjustifiable opposition in the case of trade-marks. Both Mr. Lack, the Comptroller, and Mr. Whittle his coadjutor, allude in their evidence to the assistance which the Chemists and Druggists' Trade Association had given them, and Mr. Lack says (3,164) he should certainly pay all due respect to the representations made by any such trade committee, and would supply them with information in regard to doubtful marks. Mr. Lack also submitted to the committee copies of *THE CHEMIST AND DRUGGIST* and of some other trade journals to show how information respecting new applications for trade-marks is brought to the knowledge of the persons most likely to be affected. The committee, referring to a suggestion that bodies of experts should be formed in the various classes to advise the Comptroller in reference to trade-marks applied for, say they see no objection to the voluntary formation of such committees, and have no doubt the office would give due weight to representations made by such bodies; but they cannot advise their formation under statutory authority.

It is very doubtful whether, all things considered, the registration of trade-marks has been or is likely to prove a gain to the commercial community. Before this registration was undertaken the Courts always gave protection in clear cases of infringement, and they do no more now. Nor does it seem certain that the process of law in such cases is simplified. If the dispute is one that is worth fighting for we now have two actions instead of one; one side asks for an injunction and the other demands the expungement of the opponent's mark from the register. The evidence of proprietorship, of infringement, and of damage has to be still just what it always was. In old times people chose trade-marks and used them, but until they had made a substantial property in connection with them they did not litigate about them. Now they often indulge in a costly struggle before they can induce the Comptroller to consent to the registration they apply for, and while the trade-mark is perhaps hardly worth the cost of printing it in the *Trade Marks Journal*. Of the 60,000 or more marks now registered very few indeed probably are one penny better for the registration, a large number are absolutely worthless, and it is certain that in the case of many thousands the proprietors have not got what they think they have. This is particularly so in regard to trade-marks for proprietary articles, medicines, and the like. A person registers a label and fancies he has got the exclusive title to some particular words on it, the title probably. This may be the case, but it is quite as likely that the Comptroller regards as the essential part of the label some other feature of it, or perhaps its general design, and that the unfortunate owner of the trade-mark will only discover his error when he comes to fight over it. Mr. Edmund Johnson, who gave very lengthy and valuable evidence before the committee, having in view this difficulty, advocated a special registration for labels, such as is provided in France and America. Mr. Johnson would make this registration distinct from the registration of trade-marks; and it must be admitted that he is somewhat vague as to the possible advantages of the plan he proposes. Depositors of labels thus registered, he says, would not have trade-mark rights; they would simply get a certificate of having deposited the said label at a certain date, with whatever rights the common law would give them. That is to say, they

would have just such rights as they have without registration. But Mr. Johnson finds there is a demand for something of the kind. "These little labels," he says, "are not trade-marks in themselves, but still the owners attach a value to them, and they would like some system under which they could say, 'My label is deposited and protected, and you must not copy it.'" The committee mention this suggestion in their report, but they add, "from information which we have received as to the working of a similar system which has been for some time in operation at the Patent Office in the United States, we are led to the conclusion that the proposal, if adopted, would not be likely to be advantageous."

The point that comes out most distinctly on a careful reading of the evidence of Mr. Lack and of Mr. Whittle seems to be that the best marks—that is, those which are most likely to acquire value, and are the most ready to defend, are those in which the name of the owner is associated with a particular title. Bass's "triangle" and Allsop's "hand" are perhaps two of the most valuable trade-marks in British commerce; but it is the title "Bass's Ale" or "Allsop's Ale" which is the property of peculiar value; far greater, in fact, than the right to retain the use of the designs on their labels. The Comptroller in his evidence says, "Marks such as Oldridge's Balm of Columbia are very marks which are most valuable in trade; a device would be no use, and so with all those proprietary articles." "E," said Lord Herschell, "though you might register Oldridge's Balm of Columbia, you surely would not accept Smith's Soap?" The Comptroller intimated that he was bound to accept any name in the possessive case, but he admitted afterwards that the Smiths and Browns have necessarily very weak marks.

The committee seem to have acquired some confused ideas about patents and trade-marks. They suppose the case of a man acquiring a patent for some article and registering the name under which he sells it as well, and they ask whether he has the right at the end of the term of his patent to prevent other people from selling it under that name. They evidently think he ought not to have that right. In the evidence Lords Herschell and Macnaghten put the case in regard to lin crusta and chlorodyne. The latter does not happen to be a patented article, but that does not affect the argument. If it were, it is clear that the particular compound patented would be protected for fourteen years, at which time anybody might make it; but there is no reason at all why the first patentee should not have trade-mark rights in a particular title, just the same as if he had not patented the mixture.

The recommendations of the committee are, on the whole, somewhat vague on other than trivial points; and if legislation should follow their report, it would not seem probable that any very great change will be made either in practice or in the results of registrations.

THE MANUFACTURE OF EXPLOSIVES.

THE report of Her Majesty's Inspectors of Explosives for 1887, recording the working of the Explosives Act during the year 1887, has just been issued. One specially interesting feature is the carefully summarised report of 130 accidents from explosives which came under the notice of the Home Office during the year. These caused, so far as is known, 43 deaths and injured 105 persons. Of the accidents, 13 occurred in the course of manufacture, the deaths in connection with these numbering 8. The average number of deaths in the previous ten years (since the passing of the Explosives Act giving power to inspect and regulate



SHOP BOTTLES & JARS

WITH VITRIFIED (burnt in) LABELS

(Black Letters on a ground of Pink or White Enamel).

Labels indestructible and of elegant appearance, forming an even surface with the glass or porcelain. The Jars of best porcelain, thoroughly greaseproof. The Bottles hand-made and of superior quality. Both are unsurpassed by anything in the market in every respect. Also a CHEAPER sort of Bottles and Jars, with labels equally indestructible, but very plain, especially suitable for Dispensaries, &c. Intending Buyers are requested to inspect Samples at

H. POTHS & CO.,

4 CREECHURCH LANE, LEADENHALL STREET, E.C. (late of Sugarloaf Court)

A large number of Shops have been fitted up with these Bottles and Jars, both in England and the Colonies, a list of which can be had on application.



LATEST NOVELTIES:

POISON BOTTLES of Ribbed Blue Glass, with RAISED White Vitrified Letters, and the Word "POISON" in Red at foot. **DRAWER LABELS** of Crystal Glass, with Bevelled edges and Vitrified Labels to match the above Bottles and Jars. **STANDARD LIST OF LABELS** for Chemists' Shop Bottles, Jars, and Drawers will be sent free on application.

A Stock of small sets always on hand.

TELEGRAPHIC ADDRESS: "POTHS LONDON."

See our Advertisement page.

PURE OXIDE OF ZINC (HARRIS'S)

SPECIALLY PREPARED FOR PHARMACEUTICAL PURPOSES.

PHILIP HARRIS & CO., LIM., Manufacturing Wholesale and Export Chemists, **BIRMINGHAM.**

CRYSTAL PALACE BOND'S GOLD MEDAL

29 PRIZE MEDALS

MARKING INK

& OTHER AWARDS

PRESENTED, GRATIS
TO EVERY PURCHASER OF A 1/- BOTTLE
A ROYAL LINEN MARKER IN A CASE
TWO SETS OF INDIA RUBBER ALPHABETICAL LETTERS, PAD & HOLDER
THE GENUINE LABEL HAS THE WORDS, PREPARED BY THE
DAUGHTER OF THE LATE JOHN BOND. (SEE YOU GET IT.)

PRESENTED GRATIS!!!

A FAMILY OUTFIT OF RUBBER TYPE,

Consisting of Two Sets of India Rubber Alphabetical Letters, Pad, and Mahogany Type Holder, with every 1/- Bottle. Order Sample dozen. We guarantee quick sale and repeat order.

Works: 75 SOUTHGATE ROAD, N.



Established

BISHOP'S

1857.



Granular Effervescent Preparations.

SPECIAL LIST.

	In each drachm		In each drachm
Antipyrin (5 grs.)	...	*Bismuth and Iron (4 grs.) (4 grs.)	...
Bismuth and Pepsine (4 grs.) (4 grs.)	...	*Bismuth, Iron, and Strychnia (4 grs.) (4 grs.)	...
Bismuth, Pepsine, and Quinine (4 grs.) (4 grs.) (1 gr.)	...	*Iron and Arsenic (4 grs.) 3 mins. (Fowler's Solution)	...
Bismuth, Pepsine, and Steel (4 grs.) (4 grs.) (4 grs.)	...	*Iron and Pepsine (4 grs.) (4 grs.)	...
Bismuth, Pepsine, and Strychnia (4 grs.) (4 grs.) ($\frac{1}{60}$ gr.)	...	*Iron, Quinine, and Strychnia (4 grs.) (1 gr.) ($\frac{1}{60}$ gr.)	...
Bismuth, Iron, and Quinine (4 grs.) (4 grs.) (1 gr.)	...	Iron, Quinine, and Pepsine (4 grs.) (1 gr.) (4 grs.)	...

* The Ammonio-Citrate of Iron is used in these preparations.

They are supplied in any quantity, from 2 oz. upwards.

Note the name, BISHOP, on the Seal. AND the Registered Trade Mark on the Label.



ALFRED BISHOP & SONS, MANUFACTURING CHEMISTS, **LONDON, E.**
"Speck's Fields," 48 Spelman Street,



OL. SANTALI, "BUSH."

* * The uncertainty of being able to procure pure Sandal Wood Oil has prevented Medical Men generally prescribing it ; but by prescribing "BUSH'S" certain results can be depended upon.

Dr. MACINTOSH says:—

"The Sandal Wood Oil I had from you was very satisfactory."

Dr. GORDON STABLES states:—

"I shall recommend and prescribe your excellent Sandal Wood Oil."

Dr. HARGREAVES writes:—

"I found it well adapted for quick cure."

Dr. HENDERSON, of Glasgow, writes:—

"It is a pure oil of a high character. I have tried it in numerous cases of gonorrhœa ; it was rapidly successful in all cases. The oil disagreed with no one."

THE LANCET says:—

"It is admirably adapted for use as a medical agent."

THE BRITISH MEDICAL JOURNAL states:—

"It is unusually free from disagreeable taste."

THE CHEMIST AND DRUGGIST says:—

"The fact that Dr. Henderson speaks highly of this oil is the best proof of its therapeutic activity."

[3]

ARTILLERY LANE, BISHOPSGATE, LONDON

HAY'S HOP ALE ESSENCE

REGISTERED TRADE MARK.

FOR THE MANUFACTURE OF THE FINEST AERATED HOP ALE.

Is made from the Choicest Hops Grown.

HAY'S HOP ALE ESSENCE

"Applies an excellent
stomachic, appetising, and
agreeable summer drink."

Brewers' Journal.

"A beautiful es-
sence, has a fine Hop
Aroma, and is quite a
pharmaceutical triumph."

The Chemist and Druggist.

"For this Essence a bril-
liant future may be antici-
pated. It possesses charac-
teristics very seldom to be
met with."

General Water Trade Review.

"For flavour, strength, and
solubility, this Essence
leaves nothing to be desired."

British & Colonial Druggist.

TRADE MARK



REGISTERED.

HAY'S HOP ALE

"This is an excellent Non-
Alcoholic beverage."

The Lancet.

"Evokes a delicious aroma
of Hops."

Medical Press.

"It is a Fine Bitter
Beer, pouring out with a
rich creamy head."

British & Colonial Druggist.

"Possesses the aromatic
bouquet and pleasant flavour
of the genuine Hop."

Mineral Water Trade Review.

"Is a nearer approach to
Bass or Allsopp's Ale than
any non-intoxicants preced-
ing it."

Eastern Morning News.

Trade Price, 8s. 6d. per lb.; 12 lbs. and upwards, 8s.

Quantity required, two fluid oz. to each gallon of Syrup, making 106 10-oz. Bottles.

HAY'S HOP ALE ESSENCE

FOR THE MANUFACTURE OF THE FINEST AERATED HOP ALE.

Since Mr. HAY, the well-known Manufacturing Chemist, of Hull, surprised the Pharmaceutical world, some ten years since, by the production of
until then, had been thought an impossibility, viz., a perfectly soluble and transparent ESSENCE OF GINGER, nothing he has done
has attracted so much attention in this direction as his latest ESSENCE OF HOPS, which, like his other Essences, is a production unique
in itself. The HOP ALE made from this Essence evolves a DELICIOUS AROMA OF HOPS, and supplies that much longed-for
deratum of abstainers, 'A Glass of Non-Alcoholic Beer.' We have always felt that teetotallers laboured under a disadvantage that ought not to
exist, in having no really decent beverage in the place of Wine and Beer. By this Pharmaceutical triumph of Mr. HAY, this difficulty has been over-
come, and it affords us much pleasure to commend this truly Temperance Drink to the notice of abstainers and non-alcoholic abstainers alike."

Medical Press.

HAY'S HOP ALE ESSENCE

[1]

"I certainly remarkable for the purity and reality of its results. Made from the choicest hops, and treated in a manner of which Mr. HAY appears
to possess the monopoly, this HOP ALE ESSENCE supplies an excellent stomachic, and an agreeable stimulating Summer Drink. The
HOP ALE produced by this ESSENCE is of a most refreshing and invigorating character, with all the appetising flavour and delicate aroma
of a more intoxicating prototype, which it approximates more closely than any similar preparation we have yet tasted. It may be advantageously
taken up as a speciality for which a large consumption may safely be predicted."—*Brewers' Journal.*

**W. HAY, Manufacturing Chemist, Beverley Road, HULL,
ENGLAND.**

"THE BEST NATURAL APERIENT"

Persistent attempts are made by interested parties to deceive the public by offering Natural Mineral Aperient Waters with marks, names, and designations very similar to those which are used by the **APOLLINARIS COMPANY, LIMITED** for the **NATURAL MINERAL APERIENT WATERS** imported by them.

Under these circumstances the **APOLLINARIS COMPANY, LIMITED**, feel compelled to caution the public that the **HUNGARIAN BITTER WATER** sold by the **COMPANY** always bears the name of the **APOLLINARIS COMPANY, LIMITED**, on the Label.

FAVARGER'S SYPHONS

ARE THE
BEST IN THE MARKET.

HEADS PURE TIN,
AND
GUARANTEED FREE
FROM LEAD.

GLASS,
FINEST
ANNEALED.

SYPHONS.

READ

the following—

"Edinburgh.

"We beg to say that we have used your

"Syphons for many years, and are very well

"pleased with them. We have tried other makers

"but always found yours superior. We think our

"Syphons the best of any we have seen.

"We are, yours truly, H. C. BAILDON & SON

"Bournemouth.

"We cannot, we think, do better than tell you that of the Syphon,

"supplied us by you, and used by us during three successive seasons, we have not

"had one out of order—if we except two with broken tubes; and only one rat,

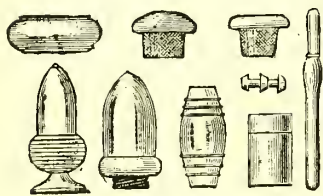
"and that on first time of filling. The Plating is, we consider, of special excellence,

"and wears well. We shall not need to look farther whilst you continue to supply us with what

"we consider the best value in the market.—Yours truly, J. M. DOWDEN & CO.

FOR PRICES, FULL PARTICULARS, AND TESTIMONIALS, APPLY TO

FAVARGER & CO., 76 TURNMILL STREET, E.C., **LONDON**



**IRVIN &
SELLERS,
WOOD TURNERS,
PRESTON.**

By Special Appointment to
H.R.H. the Duke of Connaught and the Royal Family



BOURNE WATERS.

THE PUREST IN ENGLAND.

R. M. MILLS & CO.,

BOURNE, LINCOLNSHIRE,

MANUFACTURERS OF

SODA, POTASH, LITHIA, AND SELTZER WATERS,
LEMONADE, AND AROMATIC GINGER ALE.

4-dozen and 6-dozen Cases Carriage Paid

Prices and Pamphlet on application. Agents appointed.

Messrs. INGRAM & ROYLE, 52 Farringdon Street, Wholesale Agents
for the sale of our Waters.

TEMPERANCE BEVERAGES.

A Sixpenny Bottle of

ADAMS'S EXTRACT OF HERB

Will make 8 gallons of sparkling, wholesome, and refreshing

PRIME HERB OR BOTANIC BEER.

*Unequalled in strength and richness of flavour by any preparation
made from fresh herbs.*

The Extract is very carefully manufactured, on the most improved scientific principles, from the herbs and plants gathered and dried the proper season, when their virtues are in full vigour, thus retaining their invigorating and health-giving properties.

It makes an excellent beverage, giving natural flavour and colour and a sparkling foam like bottled ale.

In Bottles, 6d. to make 8 gals.; 1s. to make 18 gals.; 2s. 6d. to make 50 gals.

ADAMS'S GINGER ALE ESSENCE

makes a sparkling, refreshing, and invigorating beverage for summer and winter.

ADAMS'S SPARKLING FOAM PRODUCER.

One tablespoonful added to 2 gallons of the Herb Beer or Ginger Ale just before bottling, gives a creamy foam like bottled ale.

Wholesale Agents,

W. EDWARDS & SONS, Queen Victoria St., London.

Specially favourable terms to large Buyers from the

PROPRIETOR,

B. ADAMS, Mansfield, Nottingham.

TELEPHONE No. 7522.

TELEGRAPHIC ADDRESS—"IDRIS KENTISH TOWN."

IDRIS & CO.

Pure Mineral Water Manufacturers,

ASCHAM STREET, LONDON, N.W.

IDRIS & CO. are at all times prepared to offer the same terms, and *greater advantages* than, any of the so-called Co-operative Associations. Their Mineral Waters are now supplied to a much greater extent and *more exclusively* to Chemists and Hospitals than those of any other Mineral Water firm or Association in London.

Being Chemists, they are practically acquainted with the requirements of the trade, and give their *personal attention* to every detail connected with their business.

Write for terms and compare prices, **INCLUDING** delivery.

PURE LIME JUICE

("IDRIS" BRAND).

THIS Juice is the first CLEAR pressings of SELECTED FRUIT in specially-designed wooden presses, prepared according to our instructions, at the "Wall House Estate," Dominica, B.W.I., and will be found of a delicious fruity flavour, without the slightest mustiness or bitterness, and fully 25 per cent. stronger in Citric Acid than the usual brands of Lime Juice.

Samples sent free, with quotations for quantities and regular supplies.

IDRIS & COMPANY,

Sole Importers and Agents,

ASCHAM STREET, LONDON, N.W.

JEWSBURY & BROWN'S

(MANCHESTER)

SPARKLING TABLE WATERS

UNRIVALLED FOR PURITY AND QUALITY.

SODA WATER.
SELTZER WATER.
POTASH WATER.
LITHIA WATER.
SIMPLE
AERATED WATER.



LEMONADE.
GINGER ALE.
QUININE TONIC.
GINGER BEER.
HOREHOUND BEER

EXTRACTS FROM ANALYTICAL REPORTS.

"The examination of the Waters which I have made has satisfied me that they have been prepared with the greatest care, and are of excellent quality."

FRANCIS JONES, F.R.S.E., F.C.S.

"On the whole, I have no hesitation in stating that your Aerated Waters are of the highest standard of purity which is practically attainable."

LOUIS SIEBOLD, F.I.C., F.C.S.

"The Lemonade is, for flavour and general excellence, superior to any similar compound which I have examined, and contains no acid but Citric Acid."

"I took a sample of the water used in your manufactory, in the preparation of the Aerated Waters, and found it, as was the case with the completed compound, entirely free from lead, copper, or any injurious matter whatever."

C. ESTROUET, F.C.S., F.C.

J. & B.'s Syphons are mounted with PURE BLOCK TIN, thus ensuring absolute immunity from dangerous metallic contamination.

113 MARKET STREET, and 44 DOWNING STREET, MANCHESTER.

PRIZE MEDAL

ESTABLISHED 1812.



HEALTH
EXHIBITION.

POTTER & CLARKE,



Registered Trade Mark

WHOLESALE AND EXPORT BOTANIC DRUGGISTS,
75 WESTON STREET, LONDON, S.E.

SPECIALITIES—

POTTER'S HERB BEER EXTRACT

For the production of a splendid Botanic Beer, with a good colour, flavour, and body, and a creamy head like bottled ale. The demand for this article last year was exceedingly large, and the demand this year bids fair to be still larger. All Chemists will find it a profitable article of sale.

Price 10d. per lb. Special quotations for quantity. In 6d. Bottles, 3/6 per dozen.

Supplies of printed matter sent with all 6d. Bottles. Will keep good in any climate.

FLUID EXTRACTS. NEW REMEDIES.
MEDICINAL HERBS IN PACKETS.

Special Agents for Messrs. Parke, Davis & Co.'s Fluid Extracts, Concentrations, Pressed Herbs, &c.

Price Lists on application.

Telegraphic Address—"HOREHOUND, LONDON."

FOREIGN INDENTS RECEIVE OUR SPECIAL ATTENTION.

GOLD PRIZE MEDAL,



LONDON, 1881.

THE

CHEMISTS'

ERATED & MINERAL WATERS ASSOCIATION, L^d.

LONDON.

HARROGATE.

BRISTOL.

Being the ONLY Company that supplies EXCLUSIVELY TO CHEMISTS and HOSPITALS manufactured Mineral Waters of the highest class, and of specified formulæ, the Directors trust to be favoured with an order for Samples from those Chemists who have not yet joined the Association, the members of which now number more than 1,700. Dividend declared 1887, 7½ per cent.

Carbonated Water	} At per dozen BOTTLES SYPHONS	Lemonade	} At per dozen BOTTLES SYPHONS
Soda Water, 5 grains to ½ pint		Ginger Ale	
„ B.P., 15 „ „		„ Beer	
„ B.P., 15 „ „		Lime Juice	
„ B.P., 15 „ „	} 1/ 1/6	Lithia Water	} 1/6 2/6
„ B.P., 15 „ „		Iron and Quinine	
„ B.P., 15 „ „		Mineral Acid	
„ B.P., 15 „ „			

Bottles at 1/6 per doz.; Syphons, 24/; Cases, 3 doz., 3/6; 4 doz., 4/6; 6 doz., 5/6; Syphon Cases at 2/6
Sparkling Rubine... .. } At 2/6 per dozen in pint Champagne Bottles.
Zoedone... .. } Bottles included.

3d. per dozen charged for carriage on Syphons in London.

NON-INTOXICATING BEER

PRODUCED AT A SMALL COST AND LITTLE TROUBLE.

ONE TABLESPOONFUL MAKES A GALLON.

MASON'S ORIGINAL

EXTRACT OR ESSENCE OF HERBS

(REGISTERED).

Composed of Yarrow, Dandelion, Comfrey, & Horehound.

FOR THE SPEEDY PRODUCTION OF

HERB OR BOTANIC BEER.

This invaluable preparation is carefully compounded from the above well-known Herbs. Notwithstanding so many imitations got up to resemble the original, it stands unrivalled for the production of a most delicious, wholesome, and non-intoxicating beverage, full of body and flavour, and a rich creamy head like bottled ale.

INVENTORS AND MANUFACTURERS—

NEWBALL & MASON, Chemists,
Park Place, NOTTINGHAM.

WHOLESALE AGENTS.—LONDON—Sanger & Sons, Lynch & Co., Barclay & Sons, Edwards & Sons, Newbery & Sons, Hovenden & Son, Sutton & Co. LIVERPOOL—Evans, Sons & Co.; Jno. Thompson. LEEDS—Goodall, Backhouse & Co.

COLONIAL AGENTS WANTED.

Beware OF OTHERS WHO PRINT
Copies of our Labels.
Beware OF OTHERS USING the same
words in order to deceive.
Beware OF CHEAP FOREIGN
PRODUCE.

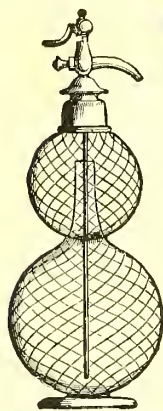
MASON'S IS A SPECIAL COMPOUND,
AND THE ORIGINAL PREPARATION.

ALL OTHERS ARE IMITATIONS.

Sold in Bottles, 6d., 1s., 2s., 5s., and 20s. each.

Is not Affected by Climate or Weather.

Prices, Circulars, Show Cards, &c., on application.



DOWN AGAIN!!!
FEVRE'S
SELTZOGENES.

Caned, each	2 PINT. 7/	3 PINT. 8/	5 PINT. 12/5	8 PINT. 20/9
Wired, each	2 PINT. 6/6	3 PINT. 7/9	5 PINT. 11/9	8 PINT. 18/11

£2 worth or more, 5 per cent. discount.

MAY, ROBERTS & CO., 9 CLERKENWELL ROAD, LONDON, E.
Telegraphic Address—"FEEDING BOTTLES LONDON."

46, MINORIES, LONDON, E.C.
New York
Sydney
&c.

SODA WATER MACHINERY
AND ALL ACCESSORIES FOR THE TRADE

BRATBY & HINCHLIFFE
HEAD OFFICE
SANDFORD ST. ANCOATS, MANCHESTER.

BOXES BOTTLES, MACHINERY
ESSENCES
Catalogues, Circulars, Testimonials
Post Free

HIGHEST AWARD

(FIRST ORDER OF MERIT, WITH BRONZE MEDAL),

ADELAIDE, 1887,

AWARDED TO

HAYWARD TYLER & CO., LONDON

FOR

AËRATED WATER MACHINERY.

DOULTON & CO., LAMBETH, LONDON, S.E.

MANUFACTURERS OF EVERY DESCRIPTION OF

WATER FILTERS.

NEW PATENT

Manganous Carbon FILTERS.
Boudoir and Table FILTERS.
Pocket and Syphon FILTERS.

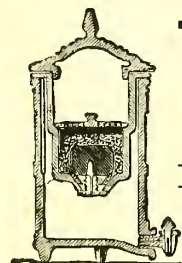
House Supply or Cistern FILTERS.
Patent Granular Charcoal FILTERS.
Refrigerator FILTERS.

MAIN SERVICE FILTERS

FOR INTERMITTENT OR CONSTANT SUPPLY.

See Reports, Analyses, &c. Detailed Lists on application.

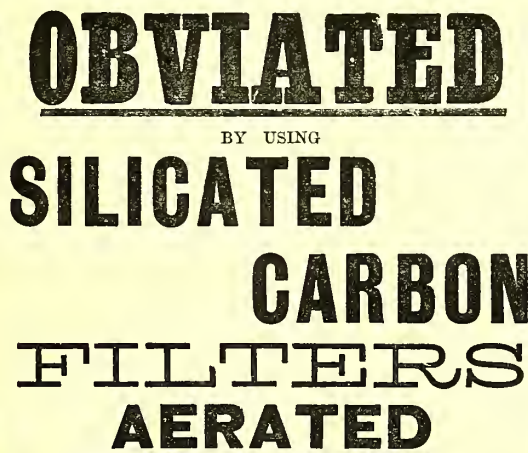
To be obtained of all Dealers.



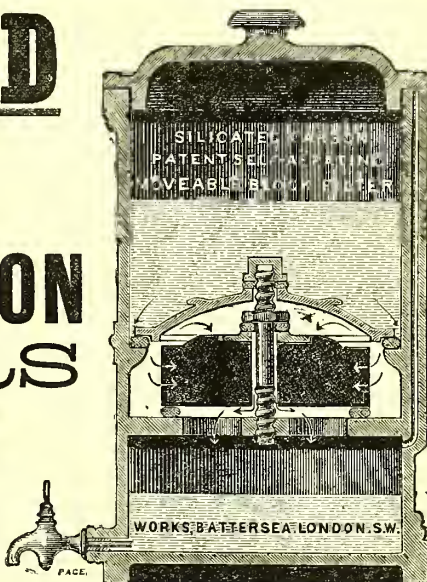
DOULTON & CO., LAMBETH, LONDON, S.E.

DEPOTS:—100 Soho Street, LIVERPOOL; Granville Wharf, BIRMINGHAM; and 6 Rue de Paradis, PARIS.

SO COMMON IN FILTERED WATER,



Glass Table Filters.



Domestic Filters.

LIBERAL DISCOUNT TO THE TRADE.

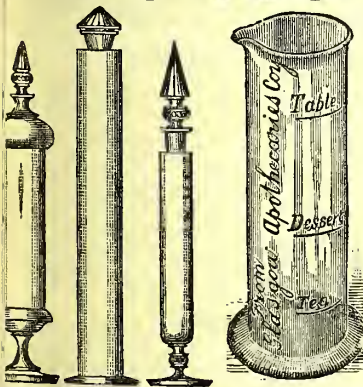
By means of which the water is Aerated and Filtered simultaneously, rendering it, even after boiling, Pure, Bright, and Palatable.

*The Silica'd Carbon Block can be Instantly
Removed, leaving the whole of the Filter Open
for Inspection and Cleansing.*

FOR PRICES AND FULL PARTICULARS, WRITE TO THE
SILICATED CARBON FILTER CO., BATTERSEA, LONDON, S.W.

J. DUNLOP MITCHELL & CO.,

130 & 136 Ingram St., Glasgow; & Old Trinity House, Water Lane, London, E.C.



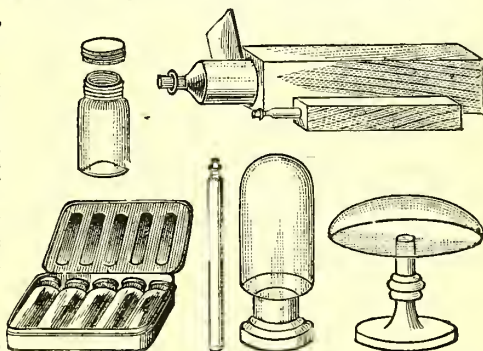
Sample Bottles, Vials and Tubes,
Wooden Pouch Cases, Corrugated Paper
and Cardboard Boxes, Parcements and
Linen Sample Bags, Travellers' Metal and
Leather Pocket Sample Cases, fitted with
all kinds of Bottles and Tubes, Fine
Stopped and Unstopped and Metal
Screw Top Bottles, Large variety of Show
Bottles and Stopped Jars for exhibiting
all kinds of Liquors, Oils, and other
Samples of Oils, Varnishes, Spirits, Paints,
Colours, Soaps, Chemicals, Drugs, Sugars,
&c., &c. Laboratory Glassware and
Utensils. Specialities. Measuring Glasses,
as per diagram, Tea, Dessert, and Table
Spoonful, with name and address of any
of our Agents, printed in opposite side;
acts as a capital and permanent advertise-
ment; price 2s. per gross; named sample
gratis per doz.

Correspondence solicited.

Samples or Illustrations on application.

Agents Wanted Abroad.

Telegrams : 'MICHELL GLASGOW.'



THE PATENT THERMO SAFEGUARD FEEDING BOTTLES.

The following are our greatly Reduced Prices:—

CLEAR BLUE TINTED.

nd 4 oz.	6/6 per gross.	12 oz.	11/6 per gross.
nd 8 oz.	7/6 "	16 oz.	15/6 "

WHITE MOULDED PHIALS.

LONG OR SQUAT SERIES.

z.	3/0 per gross.	1½ oz.	4/3 per gross.
z.	3/6 "	2 oz.	4/9 "

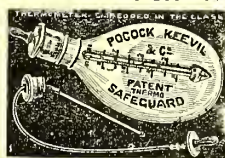
Prompt attention to country orders. Packages 1/ each, allowed for if returned. Sample bottle sent free on application.

ISAACS & CO.

25 Francis St, Tottenham Court Road, London, W.C.

ablished upwards of 70 years.

Bankers, London and Westminster.



A THERMOMETER Embedded in the Glass.

A THERMOMETER Embedded in the Glass.
REDUCTION IN RETAIL PRICES 10
1/-, 1/6, and 2/6 each.

Wholesale of London Houses and

POCOCK, KEEVIL & CO.

72 Wandsworth Road, S.W.

CONSTIPATION.

DAHL'S DYSPEPSIA CAKES.

PANIS DIETETICUS.

NATURAL REMEDY FOR INDIGESTION AND CONSTIPATION.

Recommended by several leading Medical Men.

2/6, 1/- BOXES.

FOR TERMS APPLY TO WHOLESALE HOUSES.

DAHL'S AGENCY:-41 EASTCHEAP. LONDON.

T. & H. SMITH & CO.

MANUFACTURERS OF

MORPHIÆ HYDROCHLOR.

In powder and crystals.

MORPHIÆ ACETAS**MORPHIÆ TARTRAS**Introduced by us and specially prepared
for hypodermic treatment.**JALAPINE****SALICINE****CHLOROFORM PURE****CHLOROFORM METH.**Our brand has been for many years known to
the Wholesale Trade as absolutely pure.**CODEIA****APOMORPHIÆ MUR.****GINGERINE****CAPSICINE****ALOIN****RESINA SCAMMONII****CAMPHOR MONOBROM.****EDINBURGH** Address—21 Duke Street.**LONDON** Address—12 Worship Street, E.C.**NEW YORK** Office—20 Cedar Street: **FRA^S. JA^S. MACNAUGHTAN**, Agent. [1]**"FOR THE BLOOD IS THE LIFE."****CLARKE'S**
WORLD FAMED
BLOOD MIXTURE,*The Great BLOOD PURIFIER and RESTORER.*

(Registered Trade Mark—"BLOOD MIXTURE.")

The Celebrated CURE FOR Scrofula, Scurvy, Blood and Skin Diseases, and Sores of all kinds
Wholesale of all the Wholesale Houses. Net Wholesale Price, 23/- per doz. Usual terms.**Sole Proprietors, THE LINCOLN & MIDLAND COUNTIES' DRUG COMPANY, LINCOLN**Counter Bills and Posters, with Name and Address, also Show Cards, on application. Printed matter supplied in any Language for Foreign Agents.
CAUTION.—The Proprietors will take immediate proceedings against all persons pirating their Trade Mark, "Blood Mixture," Labels, Writings, or Advertisements, or in any way infringing their rights.**PUMILINE.**THE ONLY PURE ESSENCE AND
EXTRACT OF SNOW-GROWN
PUMILIO PINES.*FOR GOUT, RHEUMATISM, SORE THROAT, CHEST AFFECTIONS*SIR MORELL MACKENZIE wrote, December 9, 1887:—"I have much pleasure in stating that I have made use of Oleum Pumilionis for the last twenty-five years that I consider it a most valuable preparation. It acts as an admirable tonic to the mucous membrane of the air passages in cases of chronic bronchitis and laryngeal catarrh. I am glad, therefore, to hear that the remedy is about to be used on a large scale, and I have no doubt the results will be highly satisfactory."
(Signed) "MORELL MACKENZIE, D."PUMILINE ALONE, with the single exception of Pinol, possesses the physical and chemical properties which give it the faculty of being administered internally with **SAFETY**. It is, therefore, essential for Chemists to use Pumiline, as it is the only preparation obtained from snow-grown Pumilio Pines.

FOR TRADE PRICE LISTS, PAMPHLETS, ANALYTICAL REPORTS, &c.—

G. & G. STERN, 11 Billiter Square, LONDON, E.C.**MEDICATED LOZENGES**For Throat Hospital, British Pharmacopœia, and every description of Medicated Lozenges for
Wholesale and Export Trade, apply to**T. BAGE BLYTON & CO.****PHARMACEUTICAL CHEMISTS.**Manufacturers also of **BOILED SWEETS** of the **BEST QUALITY POSSIBLE**

SOLE PROPRIETORS OF

TWEMLOW'S CHLORODYNE.

Which has an extensive sale among Hospitals, Dispensaries, Medical Men, and CHEMISTS and Druggists throughout the World. Proportions of active ingredients stated upon the label of every bottle.

Proprietary and other Lozenges made for the Trade. Price Lists sent on receipt of application enclosing business card.

Address—76 GORDON STREET, LOWER BROUGHTON, MANCHESTER.

BLOOD MIXTURE

The OLDEST and GENUINE.
ONE HUNDRED YEARS' REPUTATION.

Small size, 1/1½; 3 dozen for 24/-

Large size, 2/9; 1 dozen for 20/-

ALMILAJ.

THE REMEDY by SPECIALITY. PREVENTIVE and CURATIVE.

For Cholera, Diarrhoea, Dysentery, Dyspepsia, Gastralgia, Colic, & all Catarrhal Affections of the Bowels. For Coughs, Colds, Influenza, Bronchitis, Asthma, & Catarrhal Affections of the Lungs. For Hay Fever, Intermittent Fever, Ague, Neuralgia, & all ailments caused by adverse weather influences.

ALMILAJ is a concentrated medicinal preparation, composed of a specially-designed combination of vegetable products of long-tested and fully-established curative efficiency. The class of diseases above enumerated, and has been largely used in India with the most successful results. This preparation, as well as the name it bears, is the property of Surgeon-General H. W. BEEDZLER, C.S.I. (Bengal Army retired), lately, for ten years, Sanitary Commissioner for the Punjab Province; Author of "The History of Cholera in India from 1862 to 1881," and of "A Practical Treatise on the Nature, Causes, and Treatment of Cholera" (TRUBNER & Co., London), &c., and has been specially designed as a Preventive and Curative Remedy in the class of diseases indicated, with the object of supplying a convenient and ready means of treatment, available for immediate use on the spur of emergency. For it is a well-known fact that the prompt and timely treatment of such diseases on the very first appearance of their symptoms, particularly in times of their epidemic prevalence—commonly suffices to check their progress altogether, especially when the action of medicine is aided by proper care and attention to clothing and diet, as is fully explained in the Practical Treatise on Cholera above mentioned. For purposes of the object stated, ALMILAJ is prepared in a concentrated liquid form, suitable for administration to sufferers of all ages, in small doses appropriate to age and strength without the necessity of any admixture whatever. The doses range from a drop or two for Infants, to forty drops, the full dose for an Adult. The preparation with special provision to ensure the preservation of its composition and therapeutic properties for an indefinitely long period under ordinary care, and that one-ounce actinic green bottles, for convenience of portability about the person when travelling or away from home, &c. For facility of measuring the larger bottle is graduated in twelve parts, each part containing the full dose for an Adult.

Price 2s. 9d. per Bottle. Observe the word ALMILAJ is printed on the Government Stamp.

Sold Chemists and Druggists everywhere, and Wholesale by Messrs. BURGOYNE & CO., 16 Coleman Street, London, E.C.

WYLEYS' GELATINE COATED OVAL PILLS.

The only Gelatine Coated Oval Pills of ENGLISH MANUFACTURE in the Market. Special List on application.

Gross Botts.		Gross Botts.		Gross Botts.	
Bliss th.	Pepsin. Co.	Ferri Hypophosph. Comp.	Hydrarg. et Arsenic. Iodid.		
(Wyleys'), R.	Bismuth, Nit., 2	(Wyleys'). Each pill represents	(Wyleys'). Each pill equivalent to 5 minims of Donovan's		
gr. Pepsin Porci, 1 gr.; Ferr.	Rest., 1 gr.; Strychnin, ¼ gr. 3/6	1 fluid drachm of Syrup of the	Solution 1/8		
Calc Sulphid. 1½, ½, ¼, 1 gr. 1/8		Hypophosphites... .. 2/6	Manganese Binoxid Pur., 1 gr. 2/6		
Cascara Sagrada (Ext.), 2 gr. 2/-		Ferruginous (Bland's), 3 and 5 gr 1/8	Phosphorus, ½ Ext. Nuc.		
Argon. Comp.		Ferri Quininæ et Strychninæ Phosph. (Wyleys'), representing Easton's Syrup ... 3/-	Vom., ¼ gr. 2/-		
R. Argotin, 1 gr.; Ferri Sulph.			Podophyllin Resin, ½ gr.; Pil.		
Ext., 1 gr.; Ext. Hellebor., 1			Rhei Co., 4 gr. 2/6		
Ol. Sabina ½ m.; Ext. Al Soc., 1 gr. 3/-			Potass. Permang., 1 gr., 2 gr. 2/-		

WYLEYS & CO., COVENTRY.

LONDON ADDRESS—1a BURY STREET, ST. MARY AXE, E.C.

C.R. HARKER, STAGG & MORGAN

WHOLESALE & EXPORT DRUGGISTS

MANUFACTURING CHEMISTS

DIstillers & IMPORTERS of ESSENTIAL OILS

STANDARDIZED AND GUARANTEED DRUGS AND PREPARATIONS FOR HOME AND EXPORT TRADE.

TEMPORARY PREMISES—

7 and 74 GOLDEN LANE, BARBICAN, LONDON, E.C.

REGISTERED ADDRESS FOR TELEGRAMS—"EDULCINE LONDON."



DR. LALOR'S PHOSPHODYNE



For TWENTY-FIVE YEARS has maintained its world-wide reputation as

THE ONLY SAFE RELIABLE PHOSPHORIC REMEDY ever discovered for the Permanent Cure of Brain Wreckage, Paralysis, Sleeplessness, Harassing Dreams, Premature Decay of Vital Power, and all Functional and Diseased Conditions of the System dependent upon the Deficiency of the Vital Forces. It

Cures Dyspepsia, Nerve and Heart Disease.

Cures Kidney and Liver Complaints.

Cures all Blood Disorders.

Cures Consumption and General Debility.

Checks all Wasting of the Vital Forces, from whatever cause arising.

THE EFFECT of this Standard Phosphoric Remedy in Nervous Debility and its Kindred Evils is Immediate and Permanent, all the Miserable Feelings and Distressing Symptoms disappearing with a rapidity that is REALLY MARVELLOUS.

DR. LALOR'S PHOSPHODYNE

HEALTH, STRENGTH, AND ENERGY.

Is the only Medicine of the kind or name awarded a Certificate of Merit at the Calcutta Exhibition, 1883-4, where all Countries were Exhibitors, and the only Trade Mark—"PHOSPHODYNE"—Registered and Protected under the Trade Marks Act.

THOUSANDS of unimpeachable Testimonials from all parts of the World, and from the highest Medical Authorities, prove conclusively the Verdict Universal that in the World of scientific research no other Phosphoric Preparation has received such exalted praise and distinguished recognition.

Full Printed Directions for the guidance of Patients in the self-Treatment of the above Diseases are enclosed with each Bottle.

Sold in bottles at 4s. 6d. and 11s. by all Chemists throughout the World.

MANUFACTURED ONLY AT

DR. LALOR'S PHOSPHODYNE
LABORATORY,
HAMPSTEAD, LONDON, N.W.

ADVANCE WITH THE TIME!

Every Chemist should put up SYR. HYPOPHOSPH. CO., and push it as the most modern form of "Chemical Food" and "Quinine Tonic"

YEATMAN'S

SYR. HYPOPHOSPH. COMP.

Is the STRONGEST and MOST ELEGANT Syrup yet offered.

ONLY CHEMISTS ARE SUPPLIED.

It contains in each fluid drachm—

Hypophosphite of Lime	1
" " Soda	2
" " Potassa	1
" " Iron (Protoxide).....	1
" " Manganese.....	1
" " Quinine	1
" " Strychnine.....	150

SLIGHTLY ALKALINE.

The composition may be varied to suit buyers. Diluted with an equal bulk of Syrup it possesses the average strength of the advertised Syrups. As HYPOPHOSPHITE, and NOT hypophosphate of Iron, is used in this preparation, no inorganic precipitate occurs.

PRICES ON APPLICATION.

F. J. YEATMAN, M.F.S.

141 KENTISH TOWN ROAD, LONDON, N.E.

IMPORTANT TO SHIPPERS & BUYERS OF SURGICAL APPLIANCES

VINCENT WOOD

(Sole Successor to JAMES WOOD & CO., established 1840),

29, 30, 31 PATERNOSTER SQUARE, 11 & 13 ROSE ST., NEWGATE ST., LONDON, E.C.

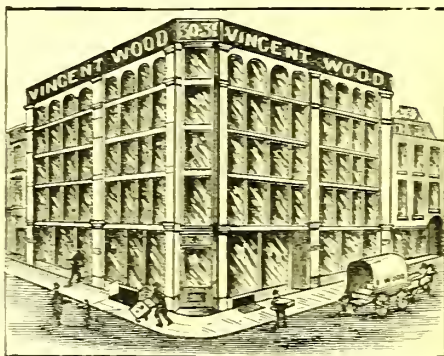


CHEST EXPANDING BRACES



WHOLESALE
AND
EXPORT ONLY.

Registered
Trade Mark,
"EUREKA"



OFFICES AND
SHOWROOMS
at No. 29.

Telegraphic
Address:

"ACME LONDON."



CHEST EXPANDING BRACES



Inventor and Exclusive Manufacturer of the CELEBRATED

MEDICATED PINE WOOL FELT GOODS.

Consisting of Chest and Lung Protectors, Ladies' and Gentlemen's Belts, Knee Caps, Throat Compresses, and Sleeping Caps for Neuralgia.

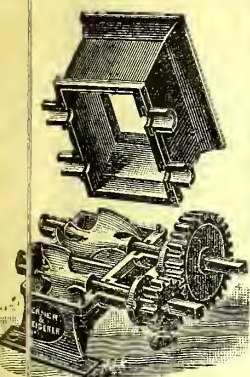
The Therapeutic properties of the Medicated Pine Wool Felt are undeniable, as Dr. BERKLEY, of the Royal College of Physicians, London, in his report states:—"Having tested the Medicated Pine Wool Felt, the invention of Mr. Vincent Wood, of Paternoster Square, London, E.C., I find it contains the drugs as mentioned by him, and I can recommend it with confidence." For full particulars and Medical Press reports see four-page Circular in the Special Issue of THE CHEMIST AND DRUGGIST, January 28, 1884.

Inventor likewise of the "Acme," "Eureka," and other well-known kinds of Chest Expanding Braces; the New Obstetric Binder, with Self-Adjusting Steel Plate, and every possible description of Ladies' and Gentlemen's Abdominal and Supporting Belts, Suspensory Bandages, &c. Being absolutely the Manufacturer of these Goods, I can give decided advantages in prices, combined with first-class workmanship and materials, over any house in the Trade.

Shippers are requested to communicate direct, or if through their Agents, to

ASK FOR VINCENT WOOD'S GOODS.

Not connected in business with anyone of the same name.



Size, Type I, for 1-lb. Mass.

THE "UNIVERSAL" KNEADING AND MIXING MACHINE FOR PILL MASS MAKING,

ALSO FOR
Horse Balls, Tooth Pastes, Ointments, Soaps, Powders, and for
general Mixing and Incorporating.

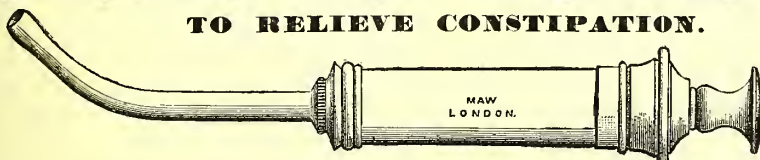
REPLACES WITH ADVANTAGE ALL OTHER APPLIANCES FOR THESE PURPOSES.

Made in various sizes, to do from $\frac{1}{2}$ lb. up to 1 ton at a time.

WERNER & PFLEIDERER, 86 Upper Ground St., LONDON, S.E.
Blackfriars Bridge,

IMPROVED SYRINGES

FOR THE
INJECTION OF GLYCERINE
TO RELIEVE CONSTIPATION.



PRICES TO THE TRADE—

PEWTER, 8/ per dozen; PEWTER, with Glass Barrel, 12/ per dozen; VULCANITE, 30/ per dozen;
VULCANITE, with Glass Barrel, 30/ per doz.; CELLULOID, with Glass Barrel, 45/ per doz.

MAW, SON & THOMPSON, ALDERSGATE ST., LONDON



ATKINSON'S ATKINSON'S PATENT TRUSS.

"Quite a new departure. The most ingenious and effective truss we have ever examined."—*Med. Press and Circular.*
"An important feature is the peculiar form of the face of the pad, which allows pressure to be given by a flat surface, or a more or less obtuse one, at discretion. The advantages of this truss are very marked."—*British Medical Journal.*
"An important improvement. The practical surgeon will see the great advantages presented by this truss."—*The Lancet.*
"Will supercede the old-fashioned, inefficient, and uncomfortable instruments which makers still continue to supply to sufferers from hernia."—*Hospital Gazette.*

Illustrated Particulars Gratis by Post from the Patentee—
B. F. ATKINSON, 7 Mill Street, Hanover Square [late 3 Hemming's Row Charing Cross.

INTERNATIONAL FISHERIES EXHIBITION, LONDON, 1883.

GOOD LIVER OIL.

The Only GOLD MEDAL
For British Exhibitors was awarded to

T. J. SMITH,
10 & 11 NORTH CHURCH SIDE, HULL.

Importer of Norwegian, Newfoundland, & other varieties.

Low Quotations on application. Delivered at London or Liverpool.

DINNEFORD'S FLUID MAGNESIA



RIGHT IN PURITY AND UNIFORM IN STRENGTH.

the most efficacious antacid and mild
agent for Delicate Constitutions.
Ladies, Children, and Infants.

ALL WHOLESALE DRUGGISTS.

METHYLENE.

Obtained by the action of Metallic Zinc on
Chloroform and Alcohol.

Discovered to be a general Anesthetic by Dr. RICHARDSON
in 1867.

1-lb. Bottles, 16s.; 3-oz., 8s. 6d.; 4-oz., 4s. 6d.; 2-oz., 2s. 6d.
COMPOUND ANESTHETIC ETHER.
For producing Local Anesthesia.
In 4-oz., 10-oz., and 20-oz. Stopped Bottles, 2s., 4s., and 7s.

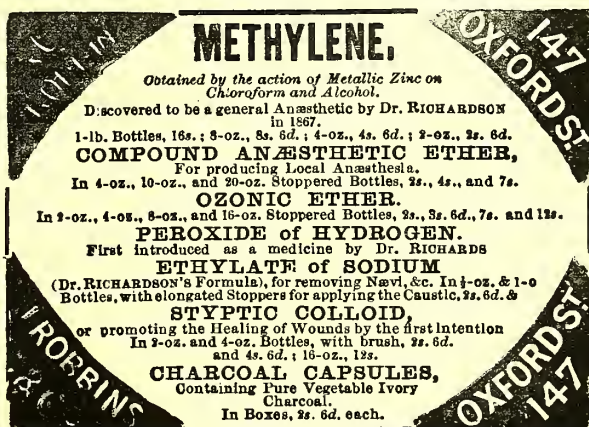
OSONIC ETHER.
In 2-oz., 4-oz., 8-oz., and 16-oz. Stopped Bottles, 2s., 3s. 6d., 7s. and 12s.

PEROXIDE OF HYDROGEN.
First introduced as a medicine by Dr. RICHARDS

ETHYLATE OF SODIUM
(Dr. RICHARDSON'S Formula), for removing Nævi, &c. In 1-oz. & 1-6
Bottles, with elongated Stoppers for applying the Caustic, 2s. 6d. &

STYPTIC COLLOID,
or promoting the Healing of Wounds by the first intention
In 2-oz. and 4-oz. Bottles, with brush, 2s. 6d.
and 4s. 6d.; 16-oz., 12s.

CHARCOAL CAPSULES,
Containing Pure Vegetable Ivory
Charcoal.
In Boxes, 2s. 6d. each.



DR. CHURCHILL'S

*Syrup of Hypophosphite of Soda,
Syrup of Hypophosphite of Lime,
Syrup of Hypophosphite of Iron,
Compound Syrup of Hypophosphites,
Syrup of Hypophosphite of Manganese,
Pills of Hypophosphite of Quinine.*

Price, 4 francs per Bottle in France.

Dr. Churchill's Pectoral Tablets,

Price, 2 francs per Box in France.

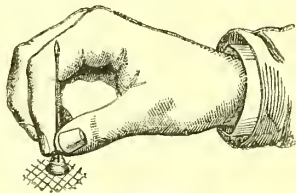
Dr. CHURCHILL, author of the discovery of the curative properties of the HYPOPHOSPHITES in Chest affections, recommends none but those prepared by

SWANN, PHARMACIEN, PARIS.

Each Bottle bears Dr. Churchill's Signature and Swann's Trade Mark.

SWANN, 12 RUE CASTIGLIONE, PARIS.

Trade Mark.



Registered.

**THE ASSOCIATION for the SUPPLY of PUKE VACCINE LYMPH,
12 PALL MALL EAST, LONDON, S.W.
SOLE AGENTS FOR DR. WARLDMONT'S CALF VACCINE.**

Tubes, 3s. each; Half Tubes, 1s. each. Pomade in vials, 5s.
HUMAN VACCINE, from healthy children only, microscopically examined and source quoted. Tubes, two-thirds full, 1s. 8d. each; Tubes one-third full and Lancet-charged Points, 1s. each; Pin-points, 1s. 1d. each. Eighteen Charged Small Points, 5s. Tubes two-thirds full (same as those mentioned above, but without source), in quantities for export, 45 per 100 Tubes. Pin-points uncharged, 1s. per dozen. Vaccinations daily, between the hours of 12 and 2, by the Consulting Physician, at the uniform fee of a guinea. P.O.O.'s (including postage, and crossed London and Westminster Bank), with orders, payable to

EDWARD DARKE, Secretary.

Office hours, 10 to 4; Saturdays, 10 to 2.

UNITED STATES.

The Mormon Elder's

DAMIANA WAFERS

THE MOST POWERFUL
INVIGORANT

EVER PRODUCED.

Permanently restores those weakened by early indiscretions, imparts youthful vigor to the BRAIN AND NERVES. A positive cure for IMPOTENCY and Nervous Debility. *Safe, and Sure.* 4/6 per box, 6 for 22. Usual discount to the Trade. Send for Circular.

F. B. CROUCH,

202 1/2 Grand Street, New York City;
London Depot, 51 Strand, W.C.

Hovenden & Son, Sanger & Son,
Barclay & Sons, Edwards & Son,
and all Wholesale Druggists.

The Most Extensive Peppermint Works in the World. Established A.D. 1869.
EXPOSITIONS INTERNATIONALES GRAND PRIZE METALS.

A. M. TODD, GROWER, DISTILLER and REFINER of

CRYSTAL WHITE OIL PEPPERMINT.

This quality may now be ordered through the principal Wholesalers of Great Britain, at special introductory prices, in sealed Bottles of 1 lb. 5oz., and 4oz. It is positively guaranteed not only in every respect the highest quality manufactured, but also the most profitable and economical in use—being required—while the highest possible results are uniformly and quickly gained. With the immense adulterations in Essential Oils guaranteed as pure by houses of supposed respectability, your protection lies in the guarantee of a Manufacturer whose life has been devoted to the advancement and protection of quality.

Notice that all genuine containers have my name impressed thereon, being sealed with Metallic Caps and guarantee of quality over my signature. (See larger advertisement in next CHEMIST AND DRUGGIST.)



SPECIAL AGENTS—

Burgoyne, Burdidge & Co., London; Jas. Woolley, Sons & Co., Manchester.

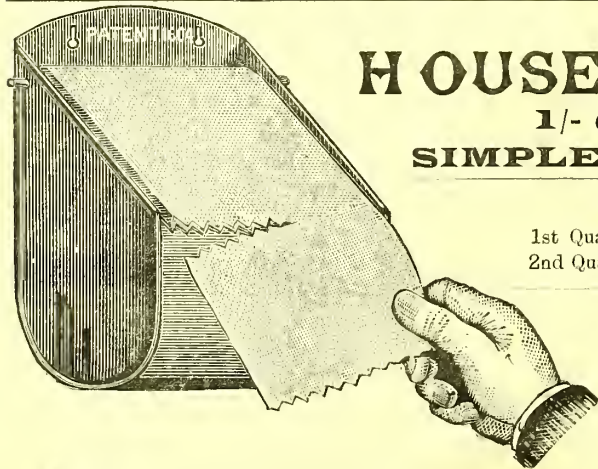
"BOSISTO'S PARROT BRAND"
"OLEUM EUCALYPTI AMYGDALINÆ."

STOCKS HELD.

Quotations and Samples may now be had on application to the Sole Agent,

GRIMWADE, RIDLEY & CO., Mildmay Chambers, 82 Bishopsgate Street.

HEAD QUARTERS FOR TOILET FIXTURES.



THE NEW
HOUSEHOLD FIXTURE,

1/- each, complete with Roll of Paper.

SIMPLE. EASY. EFFICIENT.

REDUCED PRICE FOR REFILLS.

1st Quality ... 5/6 per dozen, or 63/ per case of 1 gro.
2nd Quality ... 4/6 per dozen, or 100/ per case of 2 gro.

JOHN S. DOWNING

Commercial Street, BIRMINGHAM;

9 ROSE STREET, LONDON, E.C.; 73 VIRGINIA STREET, GLASGOW.

WANTED a well-educated Youth as Apprentice in good-class country business. Apply, Henry Davis, Chemist, 36 and 37 Northbrook Street, Newbury, Berks.

WANTED, an Apprentice in a Mixed business; no heavy work; passed Preliminary, and a Churchman, preferred. R. H. Treweeks, Chemist and Bookseller, Pembroke.

SITUATIONS WANTED.

1s. for twelve words; 6d. for every six words beyond.

ASSISTANT (22); part time; abstainer; good references. "Chimicus," 8 Market Street, Falmouth.

ASSISTANT, good-class London business. "Major," Melbourne House, Victoria Road, St. Albans.

JUNIOR; 3½ years' experience; references; London. "Prelim," 276 Albany Road, Camberwell.

TEMPORARY Manager; good references; now disengaged. G. P. Harold, Battle, Sussex.

BRANCH Manager or Assistant, in or outdoors. M., Preston-on-Wye, Hereford.

BRANCH, Locum Tenens, or Surgeon's Dispenser; good Prescriber; aged 30; long experience. 218 25, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

ASSISTANT (27), Dispenser, Prescriber; over 6 years in present situation. J. A., 47 High Street, Newcastle, Staffordshire.

LOCUM Tenens, or outdoor engagement; long and trustworthy experience. Please address W. A., 67 Leconfield Road, Canonbury, N.

JUNIOR; Minor qualification; accustomed to good Retail and Dispensing business; excellent references. T. H., 3 Grey Friars, Leicester.

ASSISTANT or Branch Manager; aged 30. Z., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

LOCUM Tenens; highest references; remuneration moderate. Collins, 10 Bloomfield Terrace, Stoke Newington.

JUNIOR; Town; good-class business; disengaged; abstainer; references. Cocker, Stationer, Ripponden, Halifax.

JUNIOR or Improver (21); in good Dispensing; others kept; present salary, £26. "Junior," Nurthen & Co., 390 Strand, W.C.

MANAGER or Dispenser, Chemist or Surgeon; temporary or permanent. Dunkerly, M.P.S., 88 Morton Road, Essex Road, Islington, N.

AS part time Assistant; in London; aged 22; tall; excellent references; accurate Dispenser. Clement Wain, Tunstall, Staffs.

JUNIOR ASSISTANT (21); abstainer; 7 years' experience. "Junior," 11 Queen's Square, Wolverhampton.

JUNIOR, in good Dispensing Business; London preferred; aged 21; 5 years' good experience; excellent references. "Statim," 22 Market Street, Wolverhampton.

PRO TEM.; disengaged May 19th; London or country; undeniable references; prepay telegrams. S., 23 De Laune Street, Kennington, London.

JUNIOR, aged 23; in good Retail and Dispensing; town or country; North preferred. K., Evans, Sons & Co., Liverpool.

LOCUM Tenens.—Before engaging elsewhere write post-card for terms, &c., to "Pharmacy," 7 St. Stephen's Road, Rotherham.

AS Assistant or Dispenser; qualified and experienced; disengaged; whole or part time. M. B. W., 28 Carter Street, Walworth Road, S.E.

AS Junior or Improver; fair extractor; knowledge of vulcanite dentistry; aged 21. Turton, 1 Booth St., Hulme, Manchester.

MIDDLE of June, as Junior; 5 years' good experience; passed Preliminary; good home and time for study more desirable than salary; tall, industrious, obliging; abstainer and Churchman; London or large centre preferred. Apply F. P., care of S. Cotterill, Pharmaceutical Chemist, Congleton.

MR. SMITH, 4 Lodge Street, Bristol, Reg. Chemist, Manager during absence, illness, or branch previous to disposal; distance immaterial.

TOWN Traveller, Manager, or other responsible position; good experience and address; unquestionable references; disengaged; aged 29; married; strictly temperate. "Traveller," 20 Princes Street, Landport, Hants.

ADVERTISER (21) seeks situation in Wholesale Druggist's at the dry counter, or in Patent Medicine house; 5 years' good references. "Cortex," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

ASSISTANT, accustomed to good-class Business; 18 years' experience (5 in Bournemouth); coast preferred; disengaged June 12th. Address X., 203 Old Christchurch Road, Bournemouth.

CHEMIST wishes to place his Son, 16, and 5 feet 8 inches in height, with a Chemist in Lancashire (doing a good class business) for two years; small premium given. Address W. Platt, care of John Thompson, Wholesale Druggist, 58 Hanover Street, Liverpool.

TOWN Traveller, Manager, or other responsible position; London and country experience; good address and references; married; aged 35; could furnish house. Address H. Watson, 10 Comyn Road, Clapham Junction.

TRAVELLER.—An Irish Chemist desires to represent an English Wholesale Firm for all Ireland; 18 years' experience; highest references, and security if necessary. Address, 219/22, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

MISCELLANEOUS.

BOXES.—Light Wood Boxes, cheapest, strongest, and best, suitable for packing all kinds of articles for transmission by post or rail; all sorts and sizes of boxes made to order; samples and price-lists free. Write for sample, stating size required, to T. Casbon, Millfield Box Works, Peterborough.

TWO 150-ton Boomer Oil Presses and Plate for sale cheap; one Single Margarine Plant for sale, consisting of churn, 2 tanks, water vat, 2 pairs of rollers, valving cart, and all fittings for same; two 245-gallon Wrought-iron Jacket Pans; one 130 gallon Cast-iron Jacket Pan. Address, A. Lyon, Engineer and Machinist, 9 Tabernacle Street, Finsbury.

LOISETTIAN School of Memory-Training.—Persons willing to join a class, each member of which will receive instructions for £1 1s. instead of £5 5s., will please address "Delta," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C. Fees to be sent to Professor Loissette, 37 New Oxford Street, London, who will, if asked, send prospectus post free.

RE SAMUEL J. H. NICHOLLS, Deceased.—All persons having claims against the estate of Samuel John Halliegy Nicolls, deceased, who lately carried on business as a Chemist and Druggist at 128 Exeter Street, and 18 Culme Terrace, Plymouth, are requested to send particulars thereof at once to Mr. John Shelly, 20 Princess Square, Plymouth, Solicitor to the Executors. See advertisement for Tenders for Goodwill, &c., of the Business.

PRELIMINARY AND MINOR.

ALL Students who are preparing should send for particulars of a method of study which will enable them to pass with ease. Enclose stamped envelope to Mr. J. Tully (Hills Prizeman), Chemist, Hastings. Established 1872. References to past and present Pupils. 32 Pupils passed the last Examinations.

STUDENTS' AIDS TO EXAMINATION.

PRELIMINARY.—Arithmetic and Metric System, 1s. How to Write an Essay, 3d. Caesar Simplified, 1s. Knotty Points in Latin Grammar, 1s. 6d. MINOR.—Equations Simplified, 1s. Illegible Autographic Prescriptions, 1s. Notes on Dispensing, 1s. Prescriptions given at the Minor, 6d. "Chemist," care of Mr. J. Edwards, Wye, Kent.

DENTISTRY.—Mechanical work of every description at moderate charges; every description of material, springs, &c., supplied at lowest prices; liberal commission on all business introduced; an experienced Surgeon-Dentist will be visiting the North of England, giving every information in Dental Mechanics to Chemists next month; fees very moderate. "Dentorium," 42 Stamford Hill.

S.E.—**MAIN ROAD.**—Old-established but neglected; present return about £400, at good profits; handsome shop, well fitted and stocked; large house on lease; price, to immediate purchaser, £250. Y. C., Wright, Layman & Umney, Southwark Street, S.E.

DISPENSING and Light Retail Business for disposal, in good class residential neighbourhood, close to Liverpool (Cheshire side); established over 20 years; capable of great increase; net profits over £300; good house, 9 rooms, private entrance. Apply for particulars to "Nemo," care of Charles Birchall, Advertising Agent, Liverpool.

A LIGHT Retail, Dispensing, and Prescribing Business, in a rapidly increasing suburb a few miles from London; average returns for the last 3 years, about £490; shop (double-fronted) well fitted and stocked; house convenient and in best position, with small garden; rental £45 per annum; price £350. Apply to "Chemist," 73 West Ferry Road, Millwall, London, E.

LONDON.—Main road, good ready-money locality; Retail Dispensing and Prescribing Business; returns nearly £650 yearly; shop handsomely fitted and good stock; large and convenient house and premises; price, about £550 required; part can be paid by instalments, and every investigation allowed; a bona fide purchaser can see the business done if wished. "Rhei," 13 Thornhill Square, London, N.

OLD Established Drug and Spirit Business.—To be sold (in consequence of death of the owner), the old-established Chemist and Druggists' business, with fully licensed vaults attached, carried on successfully for so many years by the late Mr. George Greenhow at Knottingley, Yorkshire. Premises very commodious, and in good position; immediate possession. Apply on the premises, or to Bentley & Sons, Auctioneers, Knottingley.

LIGHT Retail and Dispensing Branch; last year's returns under manager £377, with profit (*sine* Manager's salary) £280; lock-up premises; mahogany fittings; three windows; corner position, with four streets converging; suburb of seaport town, over 100,000 inhabitants; established four years; vendor entering wholesale. Apply, H. A., Hearon, Squire & Francis, 5 Coleman Street, London, E.C.

SURREY.—Unopposed, and delightfully situated, easy distance from town; well-fitted Retail and Dispensing trade, returning by manager £410; good 8-roomed house and garden; rent, £30; excellent opportunity for Dentistry, but not essential; principal giving sole attention would considerably increase returns; price £325. Address "Surrey," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

EAST COAST.—Popular watering place; old-established Retail and Dispensing (Post Office attached); returning £600; commanding situation, and in suitable hands, is capable of considerable extension; vendor, being desirous to effect early transfer, will treat liberally with prompt buyer having cash. Letters, "Rhei," 78 Durham Road, Manor Park, E.

SMALL old-established Retail Drug and Patent Medicine Business; principally ready money; good position in manufacturing market town; 8-roomed house; commodious cellars and warehouse; large garden; rent £25; suit beginner with small capital; stock, fixtures, and trade utensils about £70; no ingoing. Apply, J. Cantrell, Maxwell Terrace, Belper, Derbyshire.

MIDLANDS.—Good-class Retail Prescribing trade; important town; returning £800; same hands 25 years; good house, stable, warehouses; rent £45; price £425, or valuation. **WORCESTERSHIRE.**—Unopposed village trade; large double-fronted shop; good house, stables, &c.; returning £500; net profit £200; price £300, or valuation. **KENT.**—Unopposed village trade, returning £650, making net profit £300; rent £30; price £650. Messrs. Berdoe, 30 Jewry Street, Aldgate.

SITUATIONS OPEN.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

JUNIOR or Improver wanted. Apply, with references, to W. Gibb, Chemist, Winchester.

ASSISTANT wanted, good Prescriber and tool extractor; also Improver or Junior. J. Routly, Eabourne.

PARKER, Chemist, York, requires, for a mixed business, at once, a Junior of 3 to 5 years' experience. Give reference, salary, height, &c.

WANTED an Improver for a Light General Retail and Dispensing Business. T. M. Hales, Warrington.

WANTED, immediately, one or two Qualified Assistants for China and Japan; liberal terms. State fully previous experience to Dakin Bros., Creechur Lane, E.C.

A GOOD Dispensing Assistant, with London South Coast experience preferred; state age, height, salary, and last situation; letters not answered by return may be considered as declined. Gibbs & Gurnell, Ryde.

WANTED, at once, a qualified Assistant for Dispensing department, under 25 years of age; must be an abstainer. Apply, with full particulars, to Taylor's Druggery Company (Limited), P. O. Box D 49, Leeds.

TRAVELLER wanted, to represent a London Sundry House in the West of England; none but good men need apply. Sloan, 66 Stockwell Park Road, S.W.

WANTED, an energetic Young Man, to be branch or principal establishment. Apply, stating age, salary required, and references, to E. C. Ashford, Chemist, Northampton.

WANTED immediately, young man about 20, for indoor Assistant in Mixed country business; groceries; must be able to dispense and take charge in absence of principal; unexceptionable references required. Address, W., Box 5, Post Office, Exeter.

IMMEDIATE.—Mr. J. B. Collins, Teddington, requires at once a Qualified Assistant; must be a reliable dispenser, and capable of taking entire charge; good personal references indispensable. Apply as above, by letter enclosing, if possible, photograph, which will be returned.

A THOROUGHLY competent Manager for Dispensary in the East; first-class experience and good knowledge of general business indispensable; 30 to 35 liberal salary and interest in business. Apply, stating full particulars, M.D., 426, Messrs. Deacon's, Leadenhall Street, E.C.

TO Surgical Instrument Makers, Druggists, Sundriesmen, and Chemists.—Wanted, a Junior Salesman wholesale and retail. Apply by letter, stating age, experience, salary required, &c., B., 38 Oxford Street, London, W.

WILLIAM HESELTINE & SON, Wilson Street, Finsbury, E.C., are open to engage a first-class man to introduce and appoint Chemists as Agents for their Teas on liberal terms to one having necessary qualifications (see advertisement appearing in this issue). Apply by letter as above, in first instance.

ASSISTANT, indoor; Minor qualification; age about 25; one who has been accustomed to a good country family trade; must be an accurate and quick Dispenser; capable of taking entire charge; total abstainer and non-smoker preferred; will be treated as one of the family. Apply, James Tilson, Long Sutton, Lincolnshire.

IMMEDIATELY, a Young Man about 24 years of age for a Dispensing and Family Business; must be able to extract teeth, and prescribe; salary to commence at £40 Address, giving full particulars and experience, "Pharmacy, Messrs. Davy, Yates & Co., 64 Park Street, Southwark, London, S.E.

WANTED, a qualified married man, who would accept free rental of four rooms over a Chemist's shop for care of house and a little daily help; situation pleasant, house comfortable; no other residents; an elderly man not objected to. Address, "Mutual," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

PARSON C. BAKER,

TRANSFER AGENT,

8 Stockbridge Terrace, S.W.
(CLOSE TO VICTORIA STATION).

1. **BRHAM.**—Returns £1,000; rent £46; price £500.
2. **NCOLN.**—Returns £1,200; rent £90; price £800.
3. **SEX.**—Returns £620; rent £22; price £400.
4. **OTTINGHAM.**—Returns £850; rent £100; price £800.
5. **OTTINGHAM.**—Returns £400; rent £25; price £200.
6. **NDON, N.**—Returns £400; rent £45; price £200.
7. **NDON, W.**—Returns £300; rent £40; price £180.
8. **ANLEY.**—Returns £920; rent £30; price £600.

TENDERS.

T Chemists and Druggists.—To be Sold by Tender, the goodwill, fixtures, stock, and effects of the Business of Chemist and Druggist, lately carried on at 128 Exeter Str., Plymouth, by the late Mr. Samuel J. H. Nicholls, deceased; also the Goodwill, Fixtures, Stock, and Effects of the Business of a Chemist and Druggist, lately carried on at Cove Terrace, Plymouth, by the late Mr. Samuel J. H. Nicholls, deceased. Separate tenders for each business to be sent in on or before the 21st day of May next to Mr. John Shelly, 20 Princess Square, Plymouth, Solicitor to the Executors, from whom further particulars can be obtained.

TO BE LET OR SOLD.

s. 6d. for fifty words; 6d. for every 10 words beyond.

SOP and Parlour to be Let, West-end; good thoroughfare; plate-glass front; suitable for a Chemist and Druggist; rooms if required. 24 Connaught Street, Hy Park Square, W.

SOP to Let or Sold; freehold or leasehold; suitable for Chemist or Fancy Business, &c.; good position; large estate; no other shop allowed; most money can be raised on mortgage at 5 per cent. Apply, C. Spencer, 3 Elmsfield Parade, Earlsfield Road, Wandsworth Common.

T Let, two splendidly-built Shops in a main thoroughfare; plate-glass fronts; cellar, well lighted, 35 feet; sitting-room, kitchen with range, scullery, drug-room, and four bedrooms; near three railway stations; very busy neighbourhood; either would suit a Chemist and Druggist. Apply, H. Bland, Oxford Street, Leicester.

GRAVESEND.—To Let, for Chemist and Druggist, a new double-fronted plate-glass Shop, 12 feet high, and a large yard, centre of a block of three in a main thoroughfare, where the above is much wanted; the shops occupied by butcher and grocer; rent £35. E. W. Bland, Melbourne Villa, Old Road, Gravesend.

BUSINESS WANTED.

WANTED, a Light Retail, Dispensing Business, on or near the South or South-East Coast; principals about £1,000. H. S. Green, Newlands, Christchurch Road, Norwich.

BUSINESSES FOR DISPOSAL.

s. 6d. for fifty words; 6d. for every 10 words beyond.

FOR Sale, a Chemist's Business in densely populated part of Leeds; turnover £8 weekly, which might be considerably increased; present owner retiring from business; rent £32; price £225. Apply "B," Hirst, Brooke & Co., Leeds.

£200.—Promising Business, very cheap; London suburb; established 1886; new fittings; eight-roomed house; rent £45; good chance for young man. "Gama," care of Maw, Son & Thompson, Aldersgate Street, London, E.C.

IMMEDIATE Disposal, genuine small East-End Business, now under manager; no reasonable offer refused. Apply first instance, 196 Belsize Road, N.W.

LIVERPOOL.—Light Retail and Dispensing Business; old-established; average returns £550; full prices; good house; rent £35; price £500; principals only. Address, G., care of Messrs. Clay, Dod & Co., 52 St. Anne Street, Liverpool.

COMPACT Country Business, recently established; returning £7 weekly under management; well-fitted shop; no opposition; price £150 to an immediate purchaser. Particulars apply to "Potass. Iodid." Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C. No Agents.

TWO well-established Shops, within 9 miles of London, to be had for £1,000 cash; would not be parted with for this amount but for the owner going abroad as soon as possible. Address, J. T., care of Messrs. Hearon, Squire & Francis, 5 Coleman Street, City.

SURREY.—A good-class increasing village Business for disposal; returning over £400; good house; shop nicely fitted and stocked; high-class improving neighbourhood, with excellent opening for Dentistry; price £350. E. P., Wright, Layman & Umney, 50 Southwark Street, London, S.E.

£100.—A small old-established Business for Sale through death of proprietor, nearly opposite railway station and close to Infantry barracks; good opportunity for an active man with a small capital; seven years' lease. Apply to S. S., Holliday Week Street, Maidstone.

GRAND opportunity for pushing man with capital.—To be sold at valuation, first-class Business, capable of great extension, in a good neighbourhood; good house and shop; plate-glass front; fitted with electric bells; owner working another business. Full particulars on application to P., 291 St. Ann's Well Road, Nottingham.

HANTS.—Good-class Retail, Dispensing, and Prescribing Business, returning £400, well situated in main street, nicely fitted in modern style, and well stocked; good house, with side entrance; rent £40; price £300; to *bonâ-fide* purchasers full particulars. Apply, "Proprietor," Messrs. Edwards & Son, Queen Victoria Street, London. No Agents.

LEEDS.—Mixed Business; main thoroughfare in improving neighbourhood, mile from centre; roomy house; well-fitted shop; low rent; teeth extracting nearly pays it; steam and power available; suit small manufacturer; to suitable purchaser part purchase may remain on approved security. Apply, Mr. Walbran, Poole, near Leeds. Enclose stamp.

WANTED to dispose of at once a genuine Drug Business, doing a fair amount and capable of greater development; price required, value of fixtures and stock, greater portion of which may remain on at a small interest, as prescriber is not in want of money, but requires some one to take over the Business, he having joined the medical profession; *bonâ-fide* inquiries will be treated with. Apply, Dr. Garth, Preston.

RE W. P. BLYTH, Lichfield Road, Birmingham, Druggist and Drysalter. The trustees under the Deed of Assignment for the benefit of creditors have the above excellent Business for disposal by private treaty; the premises are good and in a commanding situation, and without the Borough; incoming (exclusive of book-debts, which could be taken to by arrangement), estimated at £650. Apply Messrs. Sharp, Parsons & Co., or Messrs. Dixon & Russell, Chartered Accountants, Colmore Row; or Messrs. Edwin Jaques & Son, Solicitors, 18 Temple Row, Birmingham.

THE CHEMIST & DRUGGIST SUPPLEMENT.

Businesses Wanted.
Businesses for Disposal.
Premises to Let.
Auction Sales.

SATURDAY, MAY 12, 1888.

Partnerships.
Situations Vacant.
Situations Wanted.
Miscellaneous.

This Supplement will be given free to any Chemist and Druggist or Assistant who will call for it at 42 Cannon Street on Friday afternoon, or will be posted on Fridays to any one who send an addressed postal wrapper.

CHEMISTS' TRANSFERS.

MESSRS. ORRIDGE & CO., 32 LUDGATE HILL, EC. CHEMISTS' TRANSFER AGENTS.

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION.

The business conducted by Messrs. ORRIDGE & Co. has been known as a Transfer Agency since the year 1845, and is well known to all the leading firms in the Trade. VENDORS have the advantage of obtaining an opinion on value derived from extensive experience, and are in most cases enabled to avoid an infinity of trouble by making a selection from a list of applicants for purchase, with the view of submitting confidential particulars to those alone who are most likely to possess business qualifications and adequate means for investment. PURCHASERS who desire early information regarding eligible opportunities for entering business will greatly facilitate their object by describing clearly the class of connection they wish to obtain.

1.—**LONDON, CENTRAL.**—Retail, Dispensing, and Prescribing Business; returns nearly £600, with *good profits*; single-fronted well-fitted shop, and good stock; business must be sold; about £400 will be accepted.

2.—**LONDON SUBURB, NORTH.**—Dispensing, Prescribing, and Retail; situate in a rapidly-increasing locality; returns average £450; large handsome shop and good stock; rent £55; new lease will be granted; about £450 required.

3.—**LONDON BRANCH BUSINESS for DISPOSAL.**—Good locality; Retail and Dispensing; returns about £500 yearly; can be much increased; well-fitted shop and good stock; about £350 required.

4.—**LONDON, N.W.**—Good rising suburb; Retail and Dispensing Business, with Prescribing; returns average £450, capable of being largely increased; handsome shop and good stock; large house and garden; price £350; open to an offer.

5.—**MIDDLESEX.**—First-class Retail and Dispensing Business, with good sale of Proprietary Articles; returns £1,450 yearly, with *net profits* of over £400; shop well fitted and attractive; convenient house in good condition; about £1,400 required.

6.—**SURREY.**—First-class Retail and Dispensing Business; returns about £550 yearly, with *good profits*; handsomely-fitted shop and good stock; large house and good garden; price £500, or offer.

7.—**PLYMOUTH.**—Retail and Prescribing Business; capable of great extension; returns £400, with *good profits*; good shop and stock; convenient house; about £300 required.

8.—**EASTERN COUNTRIES.**—Good market town; mixed country Business; returns £2,500, with *good profits*; comfortable house; moderate rental; terms, small premium for good will and valuation of stock and fixtures.

9.—**INLAND WATERING-PLACE (MIDLAND).**—High class Dispensing Homœopathic chiefly; held by vendor seven years; returns nearly £750 yearly; *very profitable*; good house, with private entrance; about £600 required.

10.—**SOUTH DEVON.**—Attractive town; mixed Business for immediate disposal through ill-health; held by vendor upwards of 30 years; returns at present about £1,150; business can be much increased by a good man; good house, &c., attached; special terms to an immediate purchaser; anyone with £400 will be treated with.

11.—**LANCASHIRE.**—Attractive locality; good-class Retail and Dispensing, with some medicine-chest trade; returns £750 yearly, *net profits* £300; good house, well situate, vendor's own property; new lease will be granted; price £700.

12.—**NORTH DEVON.**—Good market town; old-established Retail and Dispensing Business, with good country trade; returns about £600 yearly; fairly fitted shop and good working stock; good house; small premium and valuation only required.

13.—**KENT (Main Line of Rail).**—Fashionable locality; Retail and Dispensing Business; returns average nearly £1,000, with *good profits*; well-fitted shop and good stock; about £600 will be accepted from immediate purchaser.

14.—**SOUTH COAST.**—First-class Pharmacy for disposal; returns nearly £1,350; large, handsome double-fronted shop and good stock; about £1,100 is required.

N.B.—NO CHARGE TO PURCHASERS.

Other Businesses, Town and Country; particulars free on application. Personal applicants receive Messrs. O. & Co.'s direct attention and advice, where required, free.

TERMS FOR VALUATION ON APPLICATION. APPOINTMENTS BY POST OR WIRE HAVE IMMEDIATE ATTENTION.

Messrs. ORRIDGE & Co. invite communications from COLONIAL and FOREIGN firms, where business of a confidential nature requires the special attention of a London agent.

ORRIDGE & CO., 32 Ludgate Hill, LONDON, E.C.

FOR SALE.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

TO Manufacturing Chemists and Pharmacists.—For sale by private treaty, a large and miscellaneous assortment of Plant, in excellent condition, comprising Copper Vacuum Pan (200 gallons), with steam boiler complete, with fittings; powerful Air Pump on cast iron frame, with double driving pulleys; 2 Hydraulic Presses and Copper Plates, with pump fixed on cast iron tank, geared and double-driving pulleys; Johnson's Filter Press with taps, valves, and pumps for washing or exhausting; Steam Donkey Pump, with brass ram; Steam Stills and Condenser, Jacketed and Evaporating Pans, Porcelain Filters, sundry Iron and Galvanised Tanks, from 20 to 200 gallons each; also sundry apparatus, and quantity Doulton's Chemical Ware, &c., &c.; Laboratory Fittings, balance, apparatus, and sundry chemicals. For particulars, apply to J. W. Drysdale & Co., 8 Creechurch Lane, London, E.C.

SALE BY AUCTION.

AIRE Street Auction Rooms (close to Midland Station), Leeds.—Messrs. Walmsley & Sons are instructed to Sell by Auction, without reserve, on Tuesday, May 12, at 11 o'clock, pure essence lemon, in original small casks; finest cod-liver oil, in 25-gallon tin barrels; pure beeswax, senna, Colman's mustard, pure white pepper, sago, tobacco, rice flour, insect-powder tins, pink capping squares blue demy, willow boxes, drug bottles, glass cases, fullers' earth, sponges, violet-powder, &c.; the whole being of excellent quality, and affording to Chemists an excellent opportunity for economically replenishing their stocks.

PARTNERSHIP.

WANTED, an English Gentleman, with a small capital; (practical knowledge of Pharmacy necessary, but qualification not essential), to join a French gentleman (with moderate capital) as a Partner for a new kind of business (in London). Apply, by letter, Mr. Henry, 40, Nassau Street, W.

PRICE LISTS

OF A FEW OF

OUR LEADING LINES

APPEAR IN

THE CHEMISTS' AND DRUGGISTS' DIARY, 1888,

PAGES 310, 311, 312, 313.

WE RESPECTFULLY INVITE COMPARISON

To J. BREFFIT & Co., LD.
LONDON.

154 Cemetery Rd., Sheffield,
April 19, 1888.

Gentlemen,—Bottles safely to hand; they have given me every satisfaction. I have not yet come across neater nor better finished bottles for the money.

Yours respectfully,

ROBT. B. GREAVES, Chemist.

To J. BREFFIT & Co., LD.

High-class Mineral Waters Manufacturers,
German Place, Brighton, April 19, 1888.

Gentlemen,—We are pretty well stocked for bottles, cases, and boxes just now, but you need not fear our sending orders elsewhere, as your goods are excellent in quality.

Yours truly,

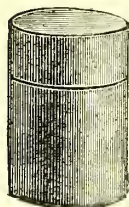
SHELVEY & CO.

BREFFITS LD.

(AIRE AND CALDER BOTTLE CO.)

OFFICES AND SHOWROOMS:

83 UPPER THAMES STREET, LONDON.

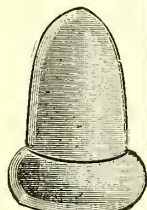

 Retail No. 1
Price 2d

MENTHOL CONES

GUARANTEED PURE.

Write for complete Price List.	No.	Description	Per 1-Gross	Per 1/2 Gross	Per Gross	All Orders for 1/2-gross & upwards are sent Carriage Paid.
	1	Polished Willow-wood Boxes—Pull-off lid	3/9	6/9	11/6	
	2	Do. do. do. do. Acorn	4/9	8/9	15/0	
	3	Boxwood Boxes—Screw lid, Pedestal shape	6/6	12/3	21/0	
	4	Do. do. do. do. (larger)	7/3	13/3	23/0	
	5	Do. do. do. do. Barrel shape	7/3	13/3	23/0	
	6	Do. do. do. do. Button shape	8/6	16/3	31/0	

SPECIALLY ASSORTED PARCELS SUPPLIED AS UNDER.



No. 2. 3d.

ASSORTED PARCEL No. 1 (1/4-Gross).

	Costing	Selling at
1 doz. No. 1 at 1/4-gross price	1/3	2/0
1 " " 2 " " "	1/7	3/0
1 " " 3 " " "	6/1	10 1/2
1 " " 4 " " "	7/4	1/0
1 " " 5 " " "	7/1	1/0
1 " " 6 " " "	8/2	1/6
3 doz. costing 5/3, retailing 9/4.	5/3 1/2	9/4 1/2

Being a profit of 4/1, namely 77 per cent.

ASSORTED PARCEL No. 2 (1/2-Gross).

	Costing	Selling at
2 doz. No. 1 at 1/2 gross price	2/3	4/0
2 " " 2 " " "	2/11	6/0
1 " " 3 " " "	1/0 1/2	1/9
1 " " 4 " " "	1/12	2/0
1 " " 5 " " "	1/11	2/0
1 " " 6 " " "	1/4 1/2	3/0
6 doz. costing 9/9, retailing 18/9.	9/9	18/9

Being a profit of 9/0, namely 92 per cent.

Terms—NET CASH
Please cross all
cheques, and make
them payable to the
MIKADO MENTHOL
COMPANY.

Being in the suburbs
of London, labour and
rent is cheaper, the
benefit of which we
give to our customers

ASSORTED PARCEL No. 3 (1 Gross).

	Costing	Selling at
3 doz. No. 1 at the rate of 11/6 per gross	2/10 1/2	6/0
3 " " 2 " " "	3/9	9/0
1 1/2 " " 3 " " "	2/7 1/2	5/3
1 1/2 " " 4 " " "	2/10 1/2	6/0
1 1/2 " " 5 " " "	2/10 1/2	6/0
1 1/2 " " 6 " " "	3/10 1/2	9/0

12 doz costing 18/10, retailing 41/3.

Being a profit of 22/5, namely 119 per cent.

A sample of
each of the six
shapes of the
"Mikado" cones
sent post free for
1/3. Send for this
set of samples
and judge of the
quality & cheap-
ness of our cones.

THE MIKADO MENTHOL CO., 5 ANSTEY ROAD, PECKHAM RYE, LONDON, S.E.

No. 6.
6d.Retail
Price.

OSCAR SUTTON & CO.,

REGISTERED



PRESTON, LANCASTHIRE

TRADE MARK.

O.S. TOOTH BLOCK, "The Best and Safest Dentifrice."

We have arranged with a first-class Die-sinker to supply us with a large quantity of name-plates, at uniform charge of seven shillings each, irrespective of the number of letters required. You can now have your Name, Business, and Address stamped on each Block, at no extra charge beyond the cost of one-plate seven shillings, as above.

Orders received through any of the leading Wholesale Houses. Orders direct to us must in cases be accompanied by a remittance.

One customer, residing in a town of less than 10,000 inhabitants, has just been supplied with eight gross, specially stamped.

O.S. Tooth Block, in Patent Metallic Box, retail 1/- each, 7/- per dozen.

PRIZE MEDAL,
International
Health Exhibition,
1884.

THE NEW PERMANENT

ENGRAVED WINDOW TABLETS

AWARD
International
Sanitary
Exhibition
1884.

IN RUBY, BLUE, AMBER, AND OPAL GLASS.

Send particulars of size, subject matter, and colour, when price for one Tablet and upwards will be sent.

For Proprietary Articles, 100 8x6 Ruby Tablets, £3 15s. 0d.

J. R. CORSAN, THE LONDON SAND-BLAST WORKS, 80 GRAY'S INN ROAD, W.C.

TO PREVENT FRAUD, DEMAND BUSINESS CARD FROM TRAVELLERS.

OKELL'S ORIGINAL MONA BOUQUET

Retail, 1/ 1/9, & 3/6; Wholesale, 7/12/ & 22/6 per doz.

This much-admired Perfume (first introduced by the late Joseph Okell) may be obtained from the leading Patent Medicine Houses, Wholesale Druggists, and Druggists' Sundry Dealers.

Sole Consignee—THOMAS WEST, 59 and 61 Chester Road, Stretford, Lancashire.

Special Agents—B. G. LENNON & CO., London, and Port Elizabeth, Cape Town, and East London, South Africa.

IMPORTANT ANNOUNCEMENT

SPECIAL CIRCULATION
OF

THE CHEMIST AND DRUGGIST

TO

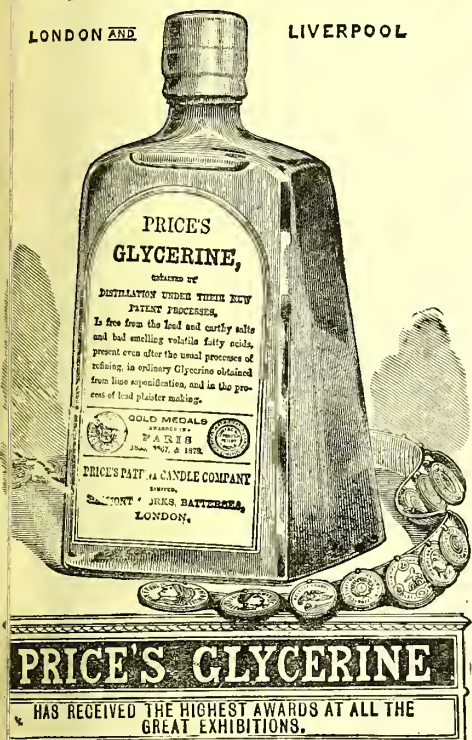
THE UNITED STATES & CANADA

On May 19, 1888.

PRICE'S PATENT CANDLE COMPANY LIMITED

LONDON AND

LIVERPOOL



PRICE'S GLYCERINE

PREPARED BY
DISTILLATION UNDER VACUUM BY
PATENT PROCESS.

Is free from the lead and earthy salts
and has emitting volatile fatty acids,
present even after the usual processes of
refining, in ordinary Glycerine obtained
from lime saponification, and in the pro-
cess of food plaster making.

GOLD MEDALS
PARIS 1875
LONDON 1883 & 1884

PRICE'S PATENT CANDLE COMPANY
LIMITED
25, MARK LANE, LONDON.

PRICE'S GLYCERINE

HAS RECEIVED THE HIGHEST AWARDS AT ALL THE
GREAT EXHIBITIONS.

BATES' SULPHUR SALT Price, 1/9 & 4/6.
(REGISTERED.)
AND
FRIZZETTA
RETAIL 1/6. RETAIL 1/6.
(REGISTERED.)

F. W. BATES, Chemist, Brooks's Bar, MANCHESTER.
Telegraphic Address—"FRIZZETTA MANCHESTER."
SUPPLIED BY ALL PATENT MEDICINE HOUSES.



**FABRIQUE
DE
MATIÈRES PREMIÈRES DE
PARFUMERIE.**

PARFUMERIES DE SEILLANS
(VAR, FRANCE).

Flower Pomades. Perfumed Oils. Flower Extracts.
Essential Oils. Distilled Waters, &c., &c.

OF ALL WHOLESALE DRUGGISTS, OR WHOLESALE ONLY OF
R. C. TREATT, Dunster House, Mincing Lane, London.

PASTA MACK.



By using this new and
excellent preparation a
most delicious BATH
AND TOILET WATER
will be obtained.
Pasta Mack
SOFTENS the WATER
and
BEAUTIFIES
the
COMPLEXION

TRADE MARK.

Of all Chemists and Perfumers.

Manufacturer, H. MACK, ULM a/D.

**SHIPKOFF & CO.
OTTO OF ROSE**

MANUFACTURERS & MERCHANTS,
KIZANLIK, BULGARIA.

VIRGIN OTTO ONLY DEALT IN.

REPRESENTED IN ENGLAND BY

GEO. P. BAKER, 19 Ivy Lane, Newgate St., London, E.C.

MENTHOL CONES.

	Per Dozen.	Write for Full Price List.
No. 6, Pillar Shape, Polished Whitewood Boxes	2/6	
" 3, Pedestal " " Boxwood	2/6	
" 4, Barrel " " " "	2/6	
" 5, Hat " " " "	3/6	
" 12, Egg " " " "	3/4	
Assorted C parcel (1/2 Gro.), 1 doz. No. 6, 1/2 doz. Nos. 3, 4, 5, 12	7/9	Carriage Paid.
" D " (1/2 "), 2 " " " 1 " " " " " " " "	26/6	

THE CASTLE MENTHOL CO., 11 FURNIVAL ST., LONDON.

ENAMELLOS.

TO CHEMISTS

AND DENTISTS.



The most Perfect WHITE TOOTH STOPPING
yet offered. Warranted to remain insoluble in
the acids of the mouth. The most easily pre-
pared filling yet produced, and the greatest
boon to the Profession.

Order through the Dépôts or direct from the
Sole Manufacturers—

**ROBERTS & COMPY.
RUSHOLME.**

Concrete with ORNAMENTAL MIXING SLAB, PRICE 5s. SAMPLES FREE.

FINEST SUBLIME OLIVE OIL

In 35 to 40 gallon quarter casks, 5/6 per gallon (casks free); ditto in 12-gallon tins, 5/9 per gallon (tins charged and returnable).
TERMS: Quarterly or current journey account, less 2½ per cent., or Cash, less 5 per cent. Cash or two references requested with first order.

OFFERED BY

A. & J. WARREN,

Wholesale and Export Druggists, Licensed
Makers of Methylated Spirit,

23 & 24 REDCLIFF STREET, BRISTOL.

N.B.—The shipments of the above article have hitherto given great satisfaction, it being very different to the so-called Sublime Olive Oil offered by many Oil Houses, while at the same time the high prices often required for Sublime Olive Oil by leading Drug Houses are not demanded.

Messrs. A. & J. WARREN are Proprietors of

WARREN'S REFINED WOOL FAT

A REMEDY FOR SKIN DISEASES.

1s. 9d. per lb. In 4-lb., 7-lb., and 14-lb. tins (tins free). A sample 2-lb. tin delivered free to any town in the United Kingdom on receipt of 4s.

ALSO OF

STODDART'S SEA SALTS.

Established nearly 40 years. Registered Trade Mark.

INVALUABLE FOR RHEUMATISM AND WEAK JOINTS.

1½d. Packets (in dozen boxes), 12s. per gross; 6d. or 2-lb. boxes, 4s. per dozen; 12. 2d. or 7-lb. boxes, 2s. 6d.; 2s. or 14-lb. boxes, 10s.; 4s. or 28-lb. bags, 36s. per dozen; 8s. or 56-lb. bags, 72s. per dozen; 16s. or 112-lb. bags, 144s.

All Proprietary Rights purchased March 15, 1886. Terms—Monthly account, less 10 per cent.; a reduction on 5-cwt. and 10-cwt. lots. Carriage paid on orders amounting to £2 and upwards. Full directions for use on each package.

Analysed and approved of by ARTHUR H. HASSALL, M.D. & OTTO HERNER, F.C.S.

SOLD BY CHEMISTS, PATENT MEDICINE DEALERS, &c.

Wholesale London Agents, BARCLAY & SONS, 95 Farringdon Street, E.C.
Liverpool Agents, A YRTON & SAUNDERS, 149 Duke Street.
Manchester Agents, JAMES WOOLLEY, SONS & CO., 69 Market Street.

ALSO OF

LADY HESKETH'S DINNER PILLS, 13½d. per box

As prepared by T. Warren, Carmarthen, and subsequently by his Executors.
Wholesale London Agents—W. SUTTON & CO., Bow Churchyard; BARCLAY & SONS, 95 Farringdon St., E.C.; FRANCIS NEWBURY & SONS, 37 Newgate St.

HORSE, CATTLE, AND SHEEP MEDICINES

BY ROYAL APPOINTMENT.



By Special Warrant,
Dated 27th December, 1865.

DAY, SON & HEWITT,

INVENTORS AND SOLE PROPRIETORS OF THE

"ORIGINAL" STOCK BREEDERS' MEDICINE CHESTS

Containing the following Matchless Remedies for all Disorders in Horses, Cattle, Calves, Sheep, & Lams:

THE CHEMICAL EXTRACT.

For assuaging pain and inflammation in all wounds, saddle galls, strains, bruises, and swellings in horses; for painting after calving and lambing, and for swollen udders and sore feet. ½-dozen box, 7s. 6d.

THE RED DRENCH.

Celebrated for inflammatory disorders; such as fevers, plenrisy, foot-and-mouth complaint, yellows, surfeit, and red water. Also for difficult calving and lambing. 3s. 6d. per dozen for Ewes; 15s. per dozen box.

THE GASEOUS FLUID.

Unmatched for colic or gripes and debility in horses, for colds, ohills, shivering fits, and diarrhoea in cattle, calves, and sheep. 20s. per dozen box.

THE CARMINATIVE CHALK.

A warm stomachic in severe diarrhoea or flux, by way of change of the gaseous fluid in great irritation of the bowels. ½-dozen box, 10s.

Price of Chests, with "Guide to Farriery"—No. 1, £6/6/0; No. 2, £2/16/6; No. 4, £2/17/6 (for horses only). Carriage paid.

Prepared only by DAY, SON & HEWITT, 22 DORSET STREET, LONDON, W.

And sold by all Wholesale Houses in London; Rocks, Tompsett & Co., Melbourne; Felton, Grimwade & Co., Melbourne; Kempthorne, Pros & Co., Dunedin & Auckland; Langford & McDutcheon, Druggists, Auckland; Fairthorne & Co., Launceston; Berkeley, Taylor & Co., Brisbane; Do rain & Co., Christchurch; Jenoure & Co., Jamaica; Neild & Co., Buenos Ayres; Willett & Co., Port Elizabeth; &c.

A LIBERAL DISCOUNT TO EXPORTERS, AND ALL PARTICULARS ON APPLICATION.

SPONGE IMPORTERS.

M. PETERSON & CO

(ESTABLISHED 1870),

75 ST. ANNE STREET, LIVERPOOL.

FOR HOME, FOREIGN, & COLONIAL MARKET

ESTABLISHED 1833.

HORSES.—LIEUT. JAMES'S BLISTER

CAUTION.

The annexed label is the top of every Pot of the ORIGINAL and GENUINE BLISTER.

The Messrs. Barry & Sons, 95 Farringdon Street, London, and Messrs. Rain & Co., Edinburgh, are no and have been Agents 55 years.

AGENTS:—Sutton & Co., 10 Bow Churchyard; W. Edwards & Sons, 157 Queen Victoria Street; Newbery & Son, 37 Newgate Street; Evans, Lescher & Evans, Bartholomew Close; Burgoine, Burkes & Co., 16 Coleman Street; Lynch & Co., 171A Aldersgate Street; South Brothers and Barclay, Birmingham; R. Hovenden & Sons, 95 C Road, Finsbury; Sanger & Son, 150 Oxford Street; Mill & Co., 40 Charterhouse Square; Corry & Soper, Shad Thames; A. Campbell, Leadenhall Street, London; Woolley, Sons & Co., 59 Market Street, Chester; Apothecaries Company, Virginia St., Glasgow; J. Thompson, 53 Hanover Street, Liverpool; Boileau & Co., Bride St., Dublin; McMaster & Co., 121 & 122 Capel Street, Dublin; Clarke, McMillan, Victoria Street, Belfast; D. Galbraith, Londonderry; M. Deh. Pharma de Anglais, Bruxelles.

And by all Chemists, in Pots, 16, 29, 51, 94, and 100. COLONIAL AGENTS:—MELBOURNE and WELLINGTON: F. G. Grimwade & Co.; SYDNEY, BRISBANE, and LAUNCESTON: Pitt Bros. Co.; DUNEDIN and AUCKLAND: Kempthorne, Prosser & Co.; SMITH, Stanistreet & Co.

W. H. JAMES, SOLE MANUFACTURER, STANFORD, FARRINGTON BERK. Advertis in "The Times" 5A square. Price of 8s. per dozen.



By Special Warrant,
Dated 10th February, 1866.

DAY, SON & HEWITT,

INVENTORS AND SOLE PROPRIETORS OF THE

"ORIGINAL" STOCK BREEDERS' MEDICINE CHESTS

Containing the following Matchless Remedies for all Disorders in Horses, Cattle, Calves, Sheep, & Lams:

THE RED PASTE BALLS AND RED POWDERS.

Invaluable for ill-conditioned horses and after hard hunting; driving for coughs, colds, staring coat, itching, swollen legs, and want of strength. The Powder is to be given in the feed. 7s. 6d. per dozen.

THE BLACK PHYSIC BALLS.

Excellent for confined bowels and for worms in horses, but an man should be first given. In bad cases of worms give a dose of 10 balls after the Ball. For cows and oxen, for stoppage of the bowels, give dissolved Ball. 8s. per dozen.

THE BRONCHOLINE

Invaluable for hnsk, hoose, or cough in cattle, calves, and sheep; for tapeworms, and worms in horses. ½-dozen box, 7s. 6d.

THE GASEODYNE.

Used as laudanum in uncontrollable spasmodic pains in ewe mblin and perfectly safe. ½-dozen box, 10s. 6d.

THE ALCOHOLIC ETHER.

Used as sweet spirits of nitre in severe colds and shivering fits ½-dozen box, 7s. 6d.

HENRY BOND'S ORIGINAL "OAK TREE" MARKING INK.

Warranted to remain fluid in all Climates. Produces a brilliant unfading Black.

The valuable invention of the late HENRY BOND claim preference over all others of the kind in the world with which it can be used, with or without the application of heat, and never any fear of injury to the finest fabrics.

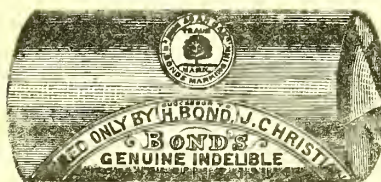
Every vendor can safely recommend this Brand with no fear of complaint, either as to quality or quantity. With view to guard against spurious imitations, write for Christian Bond's "Oak Tree Brand."

Original Inks, in all convenient forms for Export and Counter Trade, 6d. and 1s. in blue wrapper, Red Trade Mark, boxed or carded, in 1 dozen each 6d. each. Pedestal, with Stretcher, in 1 dozen and 1 dozen boxes; 1/2 oz. and 1 oz. Stoppered Bottles, in boxwood case, for the use of large establishments 2s. 6d. and 5s. each. Complete Illustrated Price List on application. Write for handsome Showcard, Handbills, and Specimen on Linen.

Liberal Discounts to Shippers and the Trade.

Sample Bottle supplied gratis and sent post-free to any part of the World on receipt of Business Card.

To be obtained through all the leading Wholesale Houses in the United Kingdom.



Facsimile of Wrapper.

Two injunctions have been granted to H. Bond's legal successors, restraining the use of the name, "H. Bond's Marking Ink," one as recently as Nov. 17, 1882, against F. J. Bond.

GENUINE



ESTABLISHED OVER 70 YEARS.

Prepared only by J. CHRISTIAN, Sole Proprietor, 46 CITY ROAD, LONDON, E.C.

FOR ALL CANINE AILMENTS. SPRATTS PATENT, LIMITED, DOG MEDICINES.

Pamphlets on Canine Diseases for gratuitous distribution. Show Cards and Handbills Supplied.

Address: SPRATTS PATENT, LIMITED, LONDON, S.E.
OR YOUR WHOLESALE HOUSE.

DAY & SONS'

WORLD-FAMED HORSE AND CATTLE MEDICINES.

THE LARGEST SALE IN THE WORLD.



FOR Colic or Grapes in Horses and Cattle.
FOR Debility and Chills in all Stock.
FOR Scur in Calves and Lambs.
FOR Hoven or Blown Cattle and Sheep.
FOR Shivering Fits in Horses.
FOR Weakness after Lambing or Calving.

PRICE-10/ PER HALF-DOZEN, OR 19/ PER DOZEN.



FOR Healing all wounds in all Animals.
FOR Kicks, Stake Wounds, Broken Knees in Horses.
FOR Cracked Heels and Saddle Galls in Horses.
FOR Sore Teats and Swollen Udders in Cows and Ewes.
FOR Dressing and Anointing in Lambing and Calving.
FOR Every Horse-keeper, Farmer, and Shepherd.

PRICE-2/6 PER BOTTLE.



FOR Fevers, Yellows, Indigestion.
FOR Red Water, Costiveness, and Dulness.
FOR Disordered System in Cattle.
FOR Bad Cleansing after Calving.
FOR Preventing Milk Fever and Inflammation.
FOR Purifying and Increasing the Milk.

PRICE-12/ PER DOZEN PACKETS.

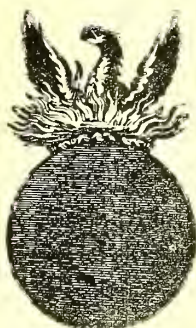


FOR Ill Condition, Off Appetite, Disordered System.
FOR Heat-lumps, Itching, and Scoury Skin.
FOR Hidebound, Bad Water, and Blood Ailments.
FOR Coughs, Colds, Sore Throats, and Fevers in Horses.

IN CANISTERS. PRICE-3/6, 7/, 14/, AND 21/.

THE "ORIGINAL" UNIVERSAL MEDICINE CHESTS, £2 4s. and £5. FOR ALL DISORDERS OF HORSES, CATTLE, CALVES, SHEEP, AND LAMBS.
Solely Prepared by the Inventors, DAY & SONS, CREWE, CHESHIRE.

May be obtained of Burgoyne, Burdidge & Co.; Singer & Sons; Evans, Lescher & Webb; Barclay & Sons, &c., London; Evans, Sons & Co., Liverpool, &c. Exporters are invited to apply for terms; Liberal Discount offered.

COLTHURST & HARDING,

BALL DENOTES
COLOUR OF PAINT.

BRISTOL—Manufactories: Phoenix Wharf and Temple Gate. Offices: Temple Gate. Telegrams: "Phoenix Bristol."

LONDON—Manufactories: Alpha Works, Millwall, E. City Office: 16 Fish Street Hill, E.C. Telegrams: "Alpha Brand London."

HARD LUSTROUS ENAMEL,

IN ALL THE ART SHADES.
For all kinds of decoration on Wood or Iron. Dry with a surface like Porcelain. Sold in small or large Tins, or in bulk. Prices and shades on application.

WHITE LEAD, ZINC WHITE,

PAINTS & COLOURS OF ALL KINDS.

MIXED PAINTS READY FOR USE,
In Tins, 1, 2, 4, 7, and 14 lbs. each.

HIGH-CLASS VARNISHES

Of all kinds, for Coachbuilders, Decorators &c.
OIL BOILERS, REFINERS & MERCHANTS
Export Orders receive special and prompt attention.

PURE**SPIRITS OF WINE**

60 o.p., 20/3 per gall.; 56 o.p., 19/9 per gall.

1/ per Gall. Discount for Cash with order.

Further allowance for quantity. STEAM STILLS

GEORGE PHILLIPS & CO.,

ST. ANDREW'S DISTILLERY, CLERKENWELL

LONDON. E.C.

S.V.R.

PURE GRAIN SPIRIT 56 O.P. ...

Do. Do. DOUBLE DISTILLED

Cash with Order. Reductions for Larger Quantities than Two Gallons

S. S. & Co's Speciality for Perfumery. Samples free.

STEPHEN SMITH & CO., BOW, LONDON,

CORNS.**WARTS.****ROBINSON'S.**

THE OLDEST AND MOST SUCCESSFUL.

1 doz. mounted on a handsome Illustrated Show Card, Retail, 6d. each; Wholesale, 3s. 6d. per doz. It is especially adapted for Export Trade and may be safely sent to the hottest climates, as each glass tube is hermetically sealed and enclosed in a cardboard case, with full directions for use.

N.B.—The above is exempt from Stamp Duty by permission of the Board of Inland Revenue. Wholesale by all the Patent Medicine Houses, from

B. ROBINSON, Manufacturing Chemist and Distiller, PENDLETON, MANCHESTER

AUSTIN & CO.

PATENTEES & MANUFACTURERS OF ROUND CARDBOARD AND OTHER SHAPED BOXES

BRITISH AND FOREIGN,

For POSTAL and general purposes; also PATENT BARREL PACKAGES with Metal ends for dry goods

Inventors of the "NOVEL" METAL PERFUME SPRINKLERS.

Office & Warehouse—8 GREVILLE ST., HATTON GARDEN, LONDON, E.C.

Steam Works, 2 Printer's Buildings, Broad Yard, Turnmill St., London, and Ring Factory, Clonakilty, County Cork.

GENUINE EMERY, EMERY CLOTH, AND BLACK LEAD**JOHN OAKEY & SONS,**

MANUFACTURERS OF

Glass Paper, Emery and Glass Cloth; Emery, Black Lead, Emery Wheels, and

Putty Powder, Crocus, Urn Powder, Tripoli, Rouge, Plate Powder, Steel Polish,

Furniture Polish, Knife Boards, Brunswick and Berlin Black, &c.

OAKEY'S WELLINGTON KNIFE POLISH

Prepared expressly for Oakey's Patent Rubber Knife Boards, Buff Leather Boards, and all the Patent Knife Cleaning Machines

Sold in Canisters with perforated Tops to prevent waste, at 1d., 2d., 3d., 6d., 1s., 2s. 6d., and 4s. each.

OAKEY'S NON-MERCURIAL SILVERSMITH'S SOAP

For Cleaning and Polishing Silver, Plate Glass, Marble, &c. Tablets, 6d. each.

OAKEY'S "POLYBRILLIANT" (Registered).

A Magic Pomade for Cleaning Brass, Copper, Tin, Pewter, Britannia Metal, &c. Never becomes dry and hard like other Metal Polishes.

Tins 1d., 2d., 3d., and 6d. each.

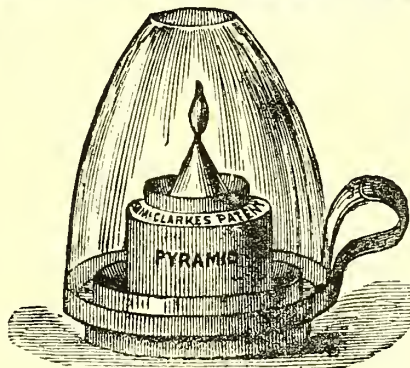
WELLINGTON BLOCK BLACK LEAD.

In 1d., 2d., and 4d. Blocks, and 1s. Boxes.

WELLINGTON EMERY & BLACK LEAD MILLS, Westminster Bridge Road, London, S.W.

Highest award and Prize Medal, Philadelphia Exhibition, 1876; and Boston, 1883. Gold Medal, Crystal Palace 1884.

SAMUEL CLARKE'S PATENT "PYRAMID" NURSERY LAMP FOOD WARMERS.



PATENT
"PYRAMID" NIGHT LAMPS, 6s. per doz., Lacquered or Bronze
AND
"PYRAMID" NIGHT LIGHTS, 7s. 6d. per doz. boxes.
Less 5 per cent. Cash.
8 Lights in each Box, burn 9 hours each.

The "Pyramid" Night Lamps render the burning a Night Light perfectly safe, entirely prevent FLICKERING (so objectionable in all Night Lights not burned in a Lamp), are clean, portable, and render a Night Light useful for many purposes where they otherwise would not be.

The "Pyramid" Food Warmers, by their peculiar construction—the glass chimney conducting and concentrating heat to the bottom of the water vessel—a larger amount of LIGHT and HEAT is obtained than can be in any other lamp of the same class. Without SMOKE or SMELL.

The "Pyramid" Night Lights are made much larger than any other Night Light, and give double the light; they are, therefore, very suitable for nursery lamps, lighting passages, lobbies, &c., and adaptable to many purposes for which the common Night Lights are useless.

DIRECTIONS FOR USING THE PATENT "PYRAMID" FOOD WARMER AND NIGHT LIGHTS.

which is required to be kept hot to be placed in the porcelain panakin, and water in the tin vessel—just sufficient to admit of the porcelain placed therein. Care should be taken in lighting the Night Lights not to injure the top, which is a protection for the wick, but simply match or taper, and allow the material to melt away.

	RETAIL.	WHOLESALE.	REDUCED PRICES—NET CASH.	
No. 1 Olds Half-pint Food, besides Water, price	3s. 6d. each	 30s. per dozen	 27/- per dozen.	Less 5 per cent. for Cash.
No. 2 Three-quarters Pint Food " "	5s. 0d. " "	 36s. " "	 30/- " "	
No. 3 One Pint Food " "	6s. 0d. " "	 42s. " "	 33/- " "	
Clarke's Hot Water Lamps " "	2s. 6d. " "	 20s. " "	 18/- " "	
" " " " " " " " " " " "	1s. 0d. " "	 8s. " "	 6/- " "	
" " " " " " " " " " " "		 7s. 6d. " "		

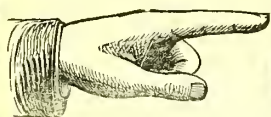
—The Patentee, in reply to numerous consumers, begs to state that he will warrant his PATENT "PYRAMID" FOOD WARMERS purpose for which they are recommended only when the "Pyramid" Night Lights are burned in them; the common night lights will not heat. Persons who find a difficulty in obtaining the "Pyramid" Night Lights in good condition are requested to write to the CLARKE, Patent "Pyramid" Night Light Works, Cricklewood, London, N.W., who will give the address of his nearest agent. The Night Lights are best when newly made; the "Pyramid" Food Warmers are sold by all respectable dealers throughout the Kingdom, at 6d., 5s., and 6s. each.

N.B.—EXTRAS.—Porcelain Panakins, No. 1 8s. Lids 2s. per dozen.
No. 2 9s. " 3s. "
No. 3 10s. " 4s. "

Tin Panakins, No. 1, 8s. No. 2, 10s. No. 3, 12s. per dozen.
Clear Glasses, 4s. Roughed, 6s. Opaline, 6s.; Coloured, 6s. per doz.

PATENT "PYRAMID" NIGHT LIGHT WORKS, CRICKLEWOOD, LONDON, N.W.

B.—See that the Trade Mark, "PYRAMID," is on every Lamp and Light.



ARMBRECHT'S COCA WINE.

AGENTS APPOINTED.
2 DUKE ST., GROSVENOR SQUARE.

FRED^K FINK & CO.,

10 & 11 MINING LANE, LONDON, E.C.

SPECIALITIES: Glycerine—Gum Arabic—Gum
Tragacanth—Pure Beeswax—Honey—Vanilloes.

GEORGE HAYNES & CO.

Hampstead Cotton Mills, Cherry Tree Lane, Stockport,

MANUFACTURERS OF

BLEACHED AND ABSORBENT WOOLS,
Grey Wool, Coloured Wools, and Jewellers' Sheets.

WHOLESALE AND EXPORT ONLY.
Telegraphic Address—"HAYNES STOCKPORT."

PERFUMES, No. 30.

FIFTY KINDS.

9s. for 20 oz., Carriage Paid.

Samples of any kind for 2 stamps.

When buying, compare my Perfumes with other makers', and buy the best.

GEORGE DURRANT, HERTFORD.

London Agents—Messrs. BAISS BROS. & CO., Mr. WILLIAM TOOGOOD

GLOY FOR LABELLING, &c.

Cheaper, cleaner, and more adhesive than gum, paste, or
dextrine. Never decomposes in any climate.

Price 12s. per cwt., equal in solution to 3d. per gallon.

Agents wanted. Gold Medals and numerous Testimonials.

Address—GLOY CO., 14 ST. MARY AXE, LONDON, E.C.

ANALYTICAL AND CONSULTING CHEMIST.

GEO. LOGAN RAIT, F.C.S., &c.

Laboratory—31 MOORGATE ST., LONDON, E.C.

Assistance given to Manufacturers and others requiring Chemical
knowledge.

Fifty per cent. discount allowed to the Trade.

A REQUISITE FOR EVERY CHEMIST.

THOMPSON'S "EXCELSIOR"

GELATINE PILL-COATING MACHINE.

See Chemist and Druggist's Diary for 1887, page 216.

SMALL MACHINE TO COAT 96 PILLS EACH TIME, £3 3s.

For further particulars apply to

JAS. ROBERTSON & CO., 35 George Street, EDINBURGH.

London Agents—S. MAW, SON & THOMPSON.

PETROLEUM JELLY.

EQUAL TO AND CHEAPER THAN VASELINE.

SANITARY FLUID AND SHEEP DIP,
THE CHEAPEST AND BEST DISINFECTANT.

GREASE, PITCH, ASPHALTE, AND ALL PRODUCTS OF TAR AND RESIN.
Samples and Prices on application.

GRINDLEY & CO., POPLAR, LONDON, E.

HORN & SON

AUTHORISED AGENTS FOR PROOURING

PATENTS AND TRADE MARKS,

SOMERSET CHAMBERS, 151 STRAND, LONDON
(NEXT TO SOMERSET HOUSE).

Guide to New Patent Law and Registration &c.

THE MANCHESTER MAKERS OF

METH. SPIRIT

Es. Alished
180.

AND NISH.

J. & D. MACNAIR & CO.,
29 Robert St., Manchester,
Bridgeton, Glasgow.
Send for prices and samples.

IMPORTERS OF

SHELLAC, GUI, ETC.

LINT.



TRADE MARK.

THE

LIVERPOOL PATENT LINT CO.

MARK STREET MILLS

NETHERFIELD ROAD NETH,

LIVERPOOL.

See Advertisement.

HARSTON & CO., LEEDS.

GINGER ALE

From PURE JAMAICA GINGER ROOT.
SELTZER, POTASS, LITHIA, SODA WATER, LEMONADE,
FOR HOME OR EXPORT.

TO PRINT YOUR OWN

DISPENSING LABELS

On blanks, or address, we supply a complete set of 17 Rubber stamps,
such as "POISON," "FOR EXTERNAL USE ONLY," "THE LOTION," &c., means
of which labels, &c., may be rapidly printed as required.

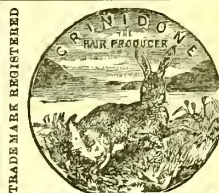
The set complete with Box, Pad, and Black or Coloured Ink, price 1/6.

E. M. RICHFORD (The City Rubber Stamp Co.), 44 Snow Hill, LONDON.

Critchley's Starch Gloss

Makes starched Linen like new. Does not stick to spider-like materials.
Once tried always wanted. Used in the Royal Laundries. Sold every-
where, in Packets, 1d., 3d., 6d., and 1s. each. Write for quotations.

Prepared only by
BLACKBURN, and
1 & 2 Australian Avenue,
LONDON, E.C.



To all those of either sex who have lost or are losing
their Hair.

CAPPER'S CRINIDONE,

THE AIR
PROOF,

WILL PROVE A BOON.

Thousands of Living Testimonials testify to the
efficacy of "CRINIDONE." In bottles, each,
Wholesale Agents—EVANS, SONS & CO., Liverpool.

Sole Manufacturer—W. B. CAPPER

21 Oxford Street, C-on-M., MANCHESTER.

NEW CURATIVE

TOOTHACHE PELLETS

(PATENTED AND REGISTERED).

Cure Toothache when everything else fails. Do not burn. Tubes containing
Four Pellets are sold at 1s. 1/6.

Wholesale on usual terms of Barclays, Newberrys, Suttons, Sams,
Hovendens, London; John Thompson, Liverpool, &c.

N.B.—ARE INVALUABLE TO DENTISTS PRIOR TO STOPPIN'
Proprietor, W. WILSON, 17 Devonshire Square, E.C.

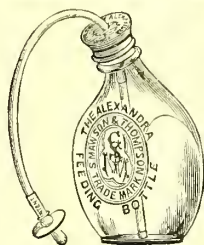
S. MAW, SON & THOMPSON'S FEEDING BOTTLES.



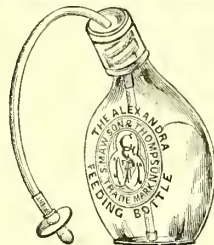
Alexandra Feeding Bottle,
New Metal or Earthenware Cap.
11/ per doz.



Alexandra Feeding Bottle,
Gilt Porcelain Cap.
20/ per doz.



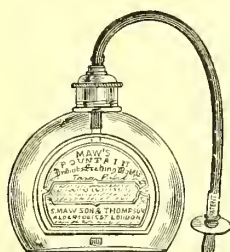
Alexandra Feeding Bottle,
Earthenware Cap.
11/ per doz.



Alexandra Feeding Bottle,
Screw Glass or Earthenware.
Stopper, 11/ per doz.



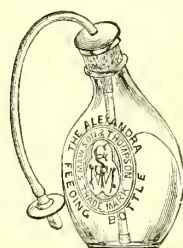
Alexandra Feeding Bottle,
Earthenware Cap.
8/ per doz.



Fountain Feeding Bottle,
Screw Glass Stopp. rs.
20/ per doz.



Fountain Feeding Bottle,
Screw Glass Stoppers.
12/6 per doz.



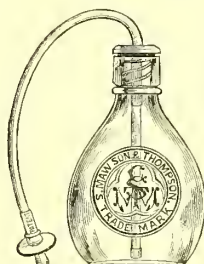
Alexandra Feeding Bottle,
Wood-Top Cork.
3/ and 3/8 per doz.



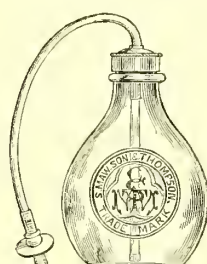
Oval Feeding Bottle,
Earthenware Cap.
8/ per doz.



Export Feeding Bottle,
Earthenware Cap.
7/3 per doz.



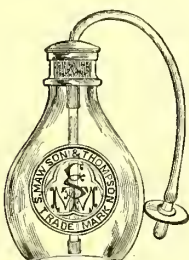
Export Feeding Bottle,
Screw Glass Stopper.
7/6 per doz.



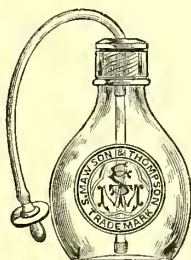
Export Feeding Bottle,
Screw Metal or Earthenware Cap.
9/ per doz.



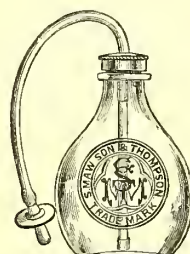
Export Feeding Bottle,
Metal Cap.
4/6 per doz.



Export Feeding Bottle,
Wood-Top Cork.
2/9 and 3/6 per doz.



Export Feeding Bottle,
Screw Glass Stopper.
4/ per doz.



Export Feeding Bottle,
Screw Metal Cap.
4/6 per doz.

FOR FURTHER PARTICULARS SEE QUARTERLY PRICE CURRENT, PAGES 46 AND 47.

SPECIAL QUOTATIONS TO WHOLESALE BUYERS.

MAW, SON & THOMPSON, LONDON

A WARNING.

1 London House Yard, London, E.C., March 20, 1888.

I beg to call especial attention to the case referred to below. In that action the Plaintiff's Manager swore, and his affidavit was in no way disputed, that—

KEATING'S INSECT DESTROYING POWDER

is quite harmless to animals and human beings, and that it does not contain any substance that is poisonous to either.

I take this opportunity of again stating that "Keating's Powder" is a special preparation, different from, and not to be compared with, any so-called Insect Powders which give so much dissatisfaction to customers.

My Trade Mark, registered October 11, 1876, is—

KEATING'S

PERSIAN

INSECT DESTROYING POWDER.

Any one infringing this I shall at once proceed against, as such a step is as much an injury to the whole trade as myself.

THOMAS KEATING.

In the High Court of Justice.

CHANCERY DIVISION.

MR. JUSTICE NORTH.

26th October, 1886.

KEATING v. POLL.

IT WAS ORDERED:

That the Defendant be perpetually restrained from stating or causing to be stated that Keating's Persian Insect Destroying Powder contains **any substance poisonous to animals or human beings**, or from making any statement to the effect that such Powder is dangerous to animals or human beings.

IT WAS FURTHER ORDERED:

That the Defendant, William Sheppard Poll, do pay to the Plaintiffs their costs of this Action.

NOTICE.—*Chemists who make statements to customers defamatory of Keating's Insect Powder will be summarily proceeded against.*



DISPENSING BOTTLES



QUININE TINTED. "L" BRAND.

Warranted Finest Quality Metal, Good Mouths, and Correct Measure.



CATALOGUE No. 42a. In any quantity from Stock.

FLATS OR OVALS.

Size	...	1 oz.	1½ oz.	2 oz.	3 oz.	4 oz.	6 oz.	8 oz.	10 oz.	12 oz.	16 oz.	20 oz.	24 oz.	32 oz.	40 oz.
Per Gross		9/-	9/6	10/-	10/6	10/6	11/6	11/6	16/-	17/-	21/-	25/-	27/6	36/-	40/-

Discount : 10 per cent. Monthly, 5 per cent. Half-yearly.

ALSO

IN ORIGINAL PACKAGES DIRECT FROM WORKS.

Carriage paid to Bristol, Glasgow, Liverpool, or London.

"L" BRAND. CATALOGUE No. 42a.

Size	...	1 oz.	1½ oz.	2 oz.	3 oz.	4 oz.	6 oz.	8 oz.	10 oz.	12 oz.	16 oz.	20 oz.	24 oz.	32 oz.	40 oz.
Per Gross		7/6	8/-	8/-	8/6	8/6	9/6	9/6	12/6	13/6	16/6	20/-	22/-	29/-	33/-

BEST GREEN FLINT FLATS OR OVALS.

CATALOGUE No. 42.

Size	...	½ oz.	1 oz.	1½ oz.	2 oz.	3 oz.	4 oz.	6 oz.	8 oz.	10 oz.	12 oz.	16 oz.	20 oz.	24 oz.	32 oz.	40 oz.
Per Gross		6/-	6/-	6/-	6/-	6/8	6/8	7/9	7/9	10/6	11/6	15/-	19/-	22/-	27/6	32/-

STRICTLY NET CASH.

CASKS OR CRATES EXTRA.

LYNCH & CO., ALDERSGATE STREET, **LONDON, E.C.**
AND
48 QUEEN STREET, MELBOURNE.

SOLE IMPORTERS
OF
APOLLINARIS WATER,
FRIEDRICHSHALL WATER,
HUNYADI JÁNOS WATER,
THE APOLLINARIS CO., LIM.,
19 REGENT STREET, LONDON, S.W.

SPECIAL PRICES ON APPLICATION.

CADBURY'S COCOA ESSENCE

The medical profession order Cadbury's Cocoa Essence in thousands of cases, as the most wholesome beverage. Be sure

you get it when asked for, as imitations are often pushed for the sake of extra profit.

"We have carefully examined the samples brought under our notice, and find that they are genuine, and that the Essence of Cocoa is just what it is declared to be by Messrs. Cadbury Brothers."—*Lancet*.

"Cocoa treated thus will, we expect, prove to be one of the most nutritious, digestible, and restorative of drinks."—*British Medical Journal*.

GUARANTEED PURE AND SOLUBLE.

EASY
TEETHING.

DO NOT LET YOUR CHILD DIE!

Fennings' Children's Powders Prevent Convulsions; are Cooling and Soothing.

FENNINGS' CHILDREN'S POWDERS

For Children Cutting their Teeth, to Prevent Convulsions.

Sold in Stamped Boxes, at 1s. 1½d. and 2s. 9d. (great saving), with full Directions.

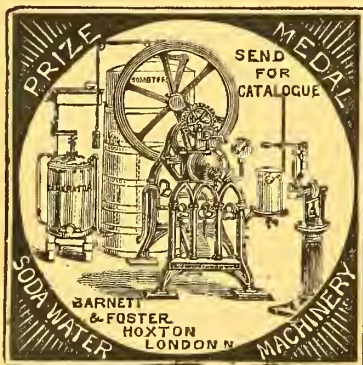
Do not contain Calomel, Opium, Morphia, nor anything injurious to a tender babe.

Chemists, by applying to the Patent Medicine Houses and Wholesale Chemists, can obtain, free of any charge, a supply of "FENNINGS' EVERY MOTHER'S BOOK," for Counter distribution.

TEETHING.

SODA WATER MACHINERY

And all Appliances for the Manufacture of all Aerated Drinks in the highest state of perfection.



PRIZE MEDALS—London, 1862, 1873, 1874; Paris, 1887, 1878 Vienna

Philadelphia, Cape, &c. **HIGHEST AWARD**—Sydney, 1878.

FIRST-CLASS CERTIFICATES & 4 PRIZE MEDALS, CALCUTTA, 181-84.

THREE GOLD, TWO SILVER, & TWO BRONZE MEDALS, INTERNATIONAL HEALTH

EXHIBITION, LONDON, 1884. 5 FIRST ORDERS OF MERIT, ADELPHI 1882

Our Machines are universally adopted throughout the world for the manufacture of Aerated Drinks, whether in bottles, syphons, or counter fountains. There are alone over 2,000 factories where our Machinery is in use, besides many thousands in the Colonies. They are the simplest, safest, and cheapest for the purpose, and produce charged gaseous water free from metallic or foreign contamination. All our Machines have a Gasometer, and it forms a most important necessity where purity of product is required, as this the gas is expanded and purified; it also removes the possibility of accidental explosion and avoids the necessity of complication—these we consider of greater importance saving of a few inches of floor space.

A complete Soda Water Plant, including Bottling Machine, for producing 100 dozen Lemonade, Ginger Beer, Ale, &c., per day, is supplied for £24.

ILLUSTRATED CATALOGUE FORWARDED FREE.

BARNETT & FOSTER,

26th Eagle Wharf Road, New North Road, London, N.